

Lower Merrimack Annual Water Use versus Stream Flow – Calendar Year 2003

The Lower Merrimack Water Management Planning Area (WMPA) covers 4046 square miles. In this assessment, a stream flow gage is used that is upstream of the designated river segment: **USGS 01092000 MERRIMACK R NR GOFFS FALLS, BELOW MANCHESTER, NH**. The Goffs Falls gage measures 3092 square miles and is located about three miles upstream of the beginning of the Designated River. The beginning of the Designated River is at the Bedford-Merrimack town line and the end is at the NH-MA border. The Designated River is 16 miles long.

The Lower Merrimack Designated River includes the watersheds of the Pemigewasset Designated River, the Winnepesaukee River, the Upper Merrimack Designated River, the Contoocook Designated River, the Piscataquog Designated River and the Souhegan Designated River. The Pemigewasset watershed is 1223 square miles and the Winnepesaukee watershed adds another 486 square miles such that the watershed at the upper end of the Upper Merrimack River is 1508 square miles. The Contoocook watershed adds 764 square miles to the Upper Merrimack watershed to equal 2339 square miles at their confluence. The Upper Merrimack watershed is 2428 square miles at its lower end. The Piscataquog Designated River enters an undesignated segment of the Merrimack River between the Upper Merrimack Designated River and the Lower Merrimack Designated River—a 20.6 mile reach. The Souhegan Designated River enters the Lower Merrimack Designated River in Merrimack contributing 220 square miles to its watershed. The results of water use in the five Designated River WMPAs, which are upstream and therefore included in the Water Management Planning Area of the Lower Merrimack Designated River, are components of the Lower Merrimack Designated River's water use versus stream flow assessment.

The descriptions in the following paragraphs cover the Lower Merrimack without details of the five Designated Rivers that contribute to the Lower Merrimack Designated River except where noted. Please refer to the annual reports for the Pemigewasset, Contoocook, Upper Merrimack, Piscataquog, and Souhegan Designated Rivers for details within these rivers.

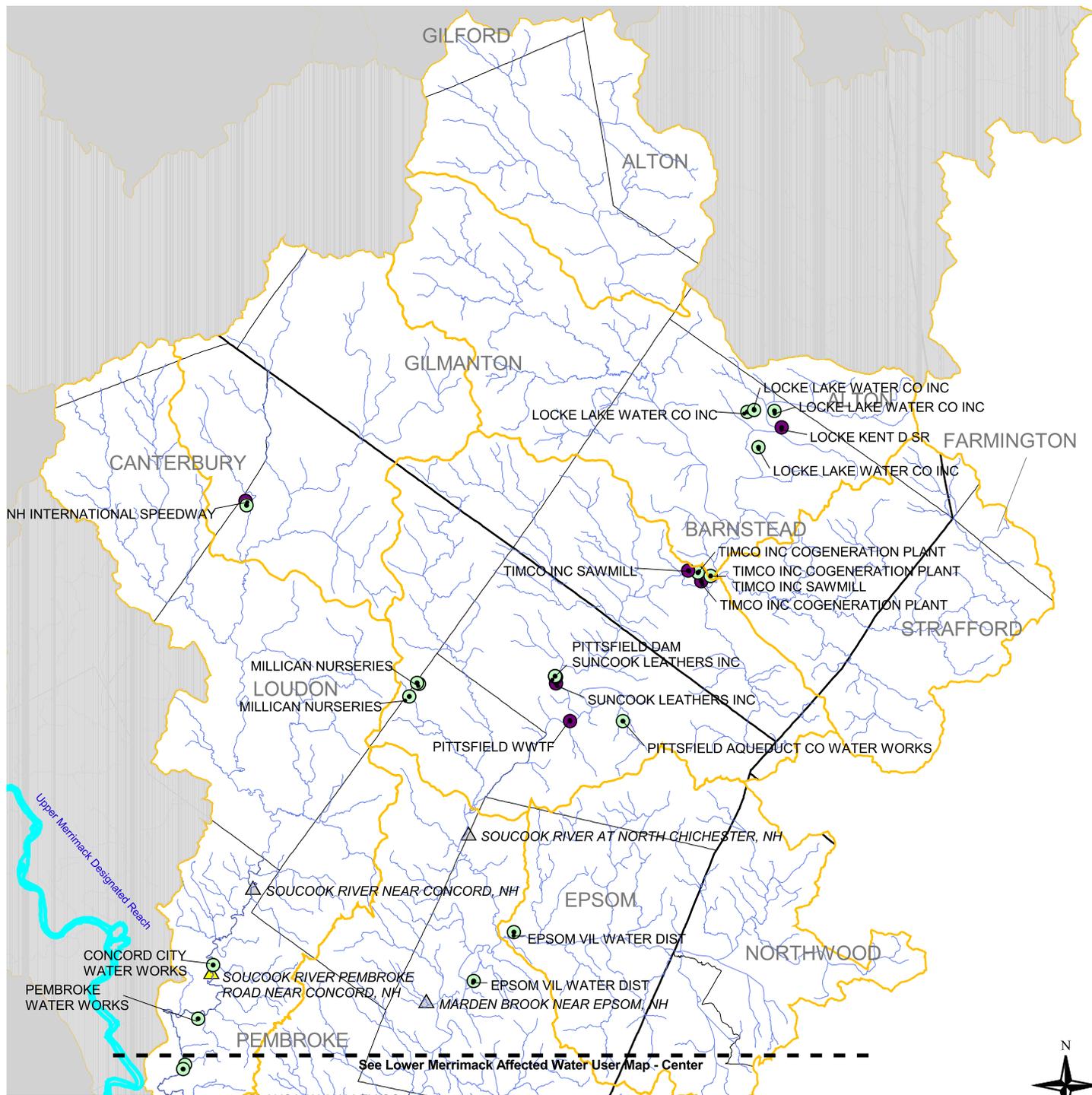
There are 86 registered sources and 31 registered, measured returns unique to the Lower Merrimack Water Management Planning Area. Of these, 46 of the sources and 27 of the returns are in the un-Designated reach upstream of the Lower Merrimack Designated River.

The Lower Merrimack Designated River during 2003 was not in compliance with the General Standard during July from the brewery in Merrimack to the end of the Designated River. Note that in 2003, the Pemigewasset and Upper Merrimack Designated Rivers were in compliance with the General Standard during the entire year, but that the Contoocook Designated River was not in compliance at its confluence with the Upper Merrimack during July. The Souhegan Designated Reach was not in compliance with the General Standard at its confluence with the Lower Merrimack during July and September.

The Lower Merrimack Water Management Planning Area (excluding the other Designated Rivers) includes registered water use by seven hydroelectric facilities. Two are on the Merrimack River and both of these are upstream of the Designate River. Water use by hydroelectric facilities are not shown in the monthly graphs because flow in is expected to equal flow out and because the General Standard does not apply to hydroelectric facilities between their point of withdrawal and point of

return per Env-Ws 1903.02(d). Other water users include 11 water works systems with 24 sources and seven waste water treatment facilities. In addition, registered water users include one irrigation system, 10 golf course irrigation systems with 12 sources, four agricultural facilities with 11 sources, and an aquaculture facility with three sources. There are seven industrial facilities, two biomass energy facilities and eight gravel mining facilities. Eleven transfers were identified that usually distributed water to an institutional or an industrial user.

Lower Merrimack River Affected Water User Facilities: Source and Discharge Locations - North



Legend

Affected Water Users

- Source
- Discharge

Stream Gages

- Active
- Inactive
- Unknown

Designated Reach

Hydrology

State boundary

Town boundary

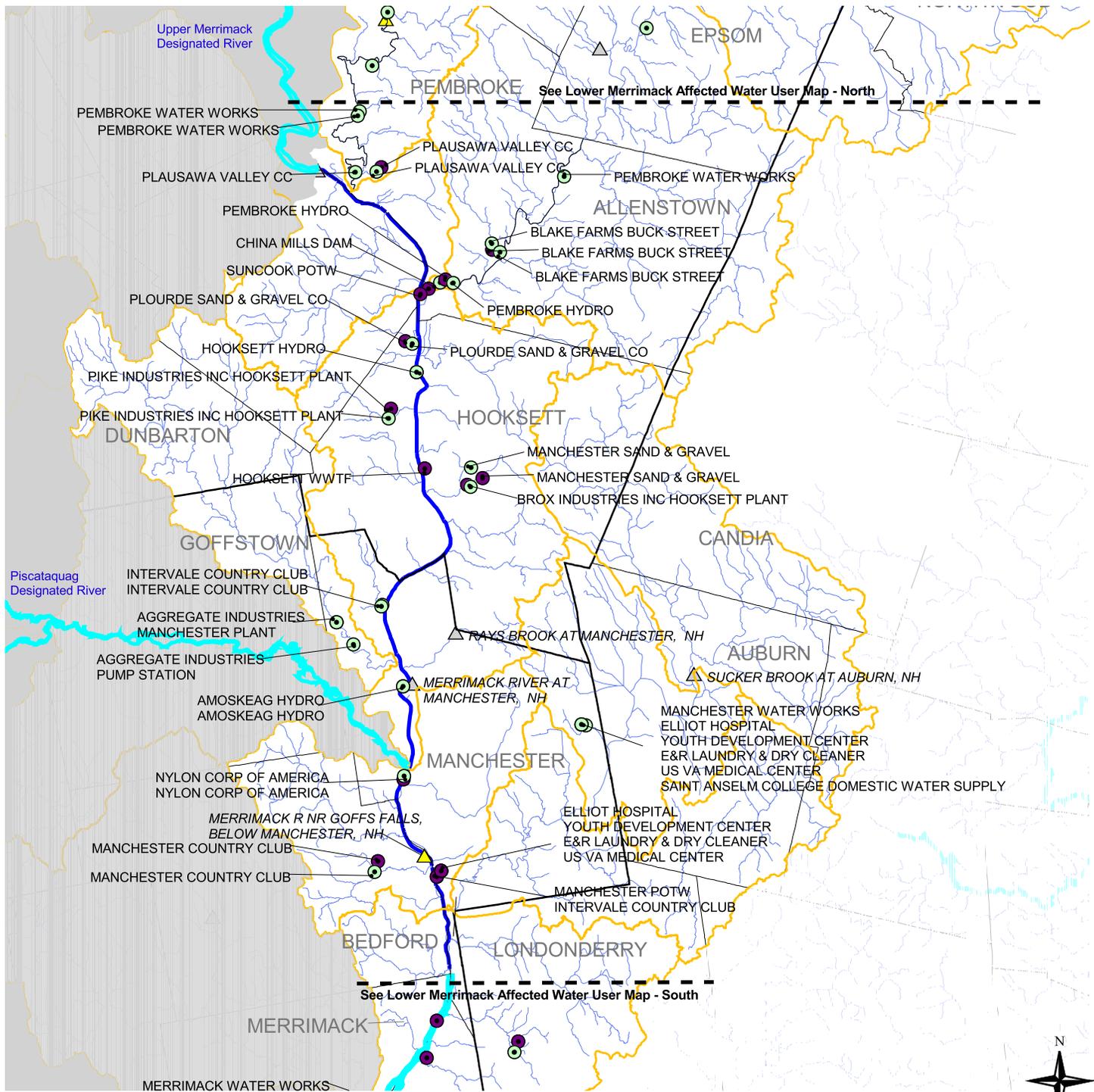
WMPA

The coverages presented are under constant revision as new sites or facilities are added. They may not contain all of the potential or existing sites or facilities. NHDDES is not responsible for the use or interpretation of this information. Not intended for legal purposes. Water users database last updated January 2004.

Map produced February 4, 2005

h:\water quality\instream flow\gis\projects\lwmpa\MerrimackLow_waterquality.apr

Lower Merrimack River Affected Water User Facilities: Source and Discharge Locations - Center



Legend

Affected Water Users

- Source
- Discharge

Stream Gages

- Active
- Inactive
- Unknown



Designated Reach

Undesignated portion
Merrimack River

Hydrology



State boundary



Town boundary



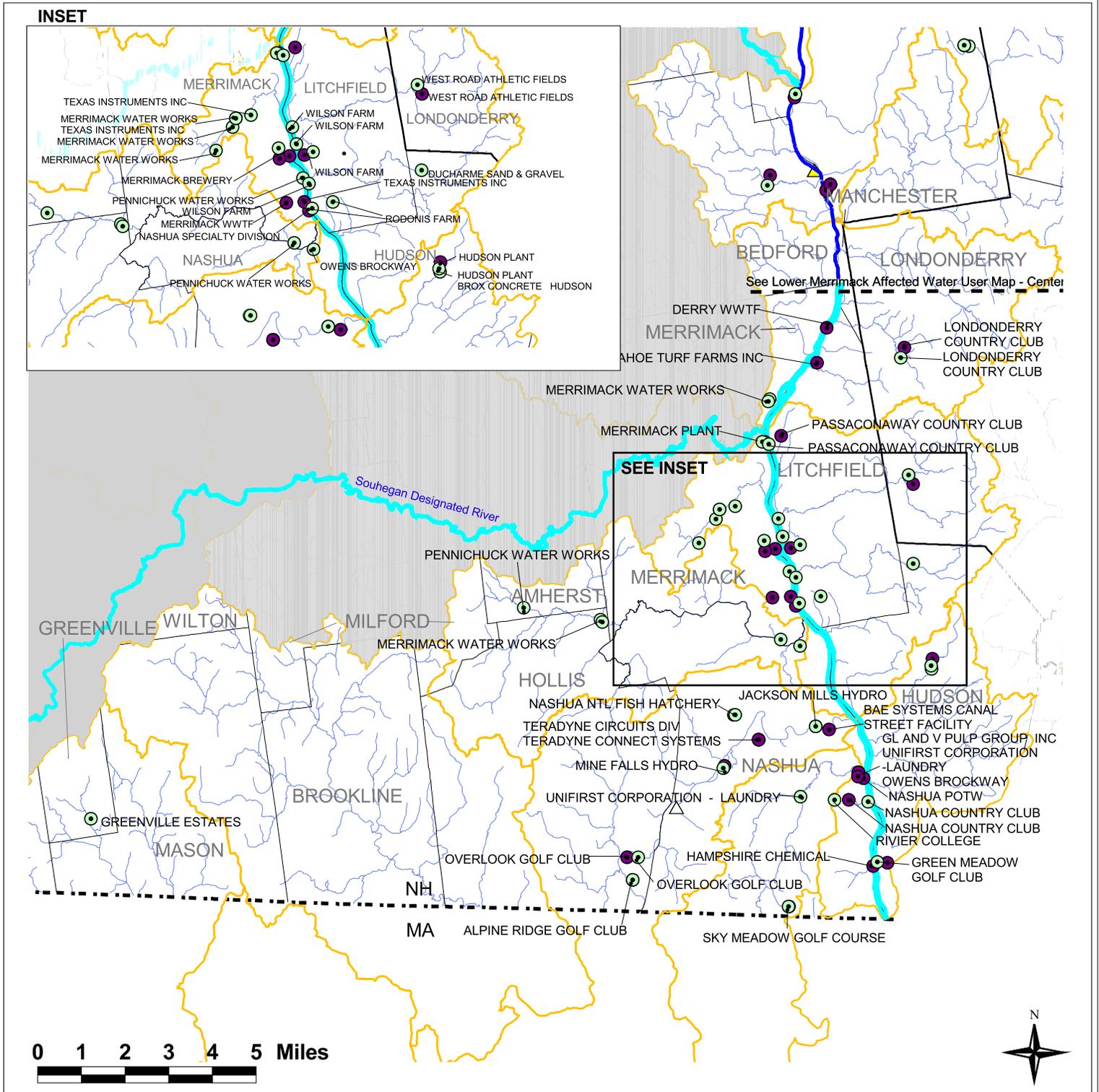
WMPA

The coverages presented are under constant revision as new sites or facilities are added. They may not contain all of the potential or existing sites or facilities. NHDDES is not responsible for the use or interpretation of this information. Not intended for legal purposes. Water users database last updated January 2004.

Map produced February 4, 2005

h:\water quality\instream flow\gis\projects\lwmpa\MerrimackLow_waterquality.apr

Lower Merrimack River Affected Water User Facilities: Source and Discharge Locations - South



The coverages presented are under constant revision as new sites or facilities are added. They may not contain all of the potential or existing sites or facilities. NHDDES is not responsible for the use or interpretation of this information. Not intended for legal purposes. Water users database last updated January 2004.

Map produced February 4, 2005

h:\water quality\instream flow\gis\projects\lwmpa\Merrimacklow_waterquality.apr

| 2003 Lower Merrimack Water Use in CFS | | | | | | | | | | | | | | | | |
|---------------------------------------|----------------------------------|-----------------|--------------------|-----------|-----------|-----------|-----------|-----------|-----------|----------|-----------|-----------|-----------|-----------|-----------|--------|
| WU_NAME | FACILITY | WUSD_ID | DA on DR (SQ MILE) | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | |
| Upper Merrimack DR | Sum of Upper Merrimack Water Use | | 3172.75 | 5.71 | 3.47 | (6.63) | (4.39) | (0.23) | 4.78 | 13.04 | 5.05 | 6.40 | 0.34 | (0.40) | 1.75 | |
| BLAKE FARM | BLAKE FARMS BUCK STREET | 20744 20744-S02 | 3172.75 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| BLAKE FARM | BLAKE FARMS BUCK STREET | 20744 20744-S01 | 3172.75 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| BLAKE FARM | BLAKE FARMS BUCK STREET | 20744 20744-D01 | 3172.75 | | | | | | | | | | | | | |
| MILLICAN NURSERIES INC | MILLICAN NURSERIES | 20743 20743-S03 | 3172.75 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| MILLICAN NURSERIES INC | MILLICAN NURSERIES | 20743 20743-S02 | 3172.75 | 0.00 | 0.00 | 0.00 | 0.01 | 0.05 | 0.09 | 0.11 | 0.02 | 0.05 | 0.05 | 0.00 | 0.00 | 0.00 |
| MILLICAN NURSERIES INC | MILLICAN NURSERIES | 20743 20743-S01 | 3172.75 | 0.00 | 0.00 | 0.00 | 0.01 | 0.06 | 0.14 | 0.19 | 0.17 | 0.11 | 0.05 | 0.02 | 0.00 | 0.00 |
| SUNCOOK LEATHERS INC | SUNCOOK LEATHERS INC | 20725 20725-S01 | 3172.75 | 0.04 | 0.04 | 0.04 | 0.04 | 0.07 | 0.13 | 0.09 | 0.14 | 0.12 | 0.14 | 0.04 | 0.04 | |
| SUNCOOK LEATHERS INC | SUNCOOK LEATHERS INC | 20725 20725-D02 | 3172.75 | (0.02) | (0.02) | (0.02) | (0.03) | (0.02) | (0.04) | (0.03) | (0.03) | (0.03) | (0.03) | (0.03) | (0.03) | |
| SUNCOOK LEATHERS INC | SUNCOOK LEATHERS INC | 20725 20725-D01 | 3172.75 | (0.01) | (0.01) | (0.01) | (0.01) | (0.05) | (0.09) | (0.06) | (0.10) | (0.10) | (0.10) | (0.01) | (0.01) | |
| PLAUSAWA VALLEY ASSOCIATE | PLAUSAWA VALLEY CC | 20704 20704-S02 | 3172.75 | 0.00 | 0.00 | 0.00 | 0.00 | 0.02 | 0.04 | 0.08 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| PLAUSAWA VALLEY ASSOCIATE | PLAUSAWA VALLEY CC | 20704 20704-S01 | 3172.75 | 0.00 | 0.00 | 0.00 | 0.00 | 0.02 | 0.04 | 0.08 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| PLAUSAWA VALLEY ASSOCIATE | PLAUSAWA VALLEY CC | 20704 20704-D01 | 3172.75 | | | | | | | | | | | | | |
| NH INTERNATIONAL SPEEDWAY | NH INTERNATIONAL SPEEDWAY | 20653 20653-S01 | 3172.75 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.12 | 0.16 | 0.06 | 0.12 | 0.00 | 0.00 | 0.00 |
| NH INTERNATIONAL SPEEDWAY | NH INTERNATIONAL SPEEDWAY | 20653 20653-D01 | 3172.75 | 0.00 | 0.00 | 0.00 | (0.00) | (0.00) | (0.00) | (0.12) | (0.16) | (0.06) | (0.12) | 0.00 | 0.00 | 0.00 |
| SAINT ANSELM COLLEGE | DOMESTIC WATER SUPPLY | 20651 20009-S01 | 3172.75 | 0.10 | 0.13 | 0.12 | 0.14 | 0.06 | 0.08 | 0.13 | 0.11 | 0.20 | 0.17 | 0.15 | 0.10 | |
| US VA MEDICAL CENTER | VETERANS HOSPITAL | 20648 20076-D01 | 3172.75 | (0.05) | (0.04) | (0.03) | (0.03) | (0.04) | (0.04) | (0.04) | (0.06) | (0.06) | (0.06) | (0.05) | (0.05) | (0.03) |
| US VA MEDICAL CENTER | VETERANS HOSPITAL | 20648 20009-S01 | 3172.75 | 0.05 | 0.04 | 0.03 | 0.03 | 0.04 | 0.04 | 0.04 | 0.06 | 0.06 | 0.06 | 0.06 | 0.05 | 0.03 |
| E&R LAUNDRY & DRY CLEANER | E&R LAUNDRY & DRY CLEANER | 20646 20076-D01 | 3172.75 | (0.07) | (0.07) | (0.06) | (0.07) | (0.07) | (0.04) | (0.06) | (0.05) | (0.06) | (0.08) | (0.05) | (0.03) | |
| E&R LAUNDRY & DRY CLEANER | E&R LAUNDRY & DRY CLEANER | 20646 20009-S01 | 3172.75 | 0.07 | 0.07 | 0.06 | 0.07 | 0.07 | 0.04 | 0.06 | 0.05 | 0.06 | 0.08 | 0.05 | 0.05 | |
| INTERVALE COUNTRY CLUB | INTERVALE COUNTRY CLUB | 20644 20644-S02 | 3172.75 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| INTERVALE COUNTRY CLUB | INTERVALE COUNTRY CLUB | 20644 20644-S01 | 3172.75 | 0.00 | 0.00 | 0.00 | 0.03 | 0.06 | 0.09 | 0.11 | 0.04 | 0.04 | 0.02 | 0.00 | 0.00 | 0.00 |
| INTERVALE COUNTRY CLUB | INTERVALE COUNTRY CLUB | 20644 20076-D01 | 3172.75 | | | | | | | | | | | | | |
| NH YOUTH DEVELP SERVICE | YOUTH DEVELOPMENT CENTER | 20640 20076-D01 | 3172.75 | | | | | | | | | | | | | |
| NH YOUTH DEVELP SERVICE | YOUTH DEVELOPMENT CENTER | 20640 20009-S01 | 3172.75 | 0.03 | 0.03 | 0.03 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 |
| CENTRAL WATER SYSTEMS | LOCKE LAKE WATER CO INC | 20583 20583-S04 | 3172.75 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| CENTRAL WATER SYSTEMS | LOCKE LAKE WATER CO INC | 20583 20583-S03 | 3172.75 | 0.05 | 0.05 | 0.05 | 0.04 | 0.04 | 0.06 | 0.06 | 0.06 | 0.08 | 0.05 | 0.04 | 0.04 | 0.04 |
| CENTRAL WATER SYSTEMS | LOCKE LAKE WATER CO INC | 20583 20583-S02 | 3172.75 | 0.14 | 0.14 | 0.19 | 0.14 | 0.15 | 0.14 | 0.18 | 0.22 | 0.18 | 0.19 | 0.18 | 0.19 | 0.19 |
| CENTRAL WATER SYSTEMS | LOCKE LAKE WATER CO INC | 20583 20583-S01 | 3172.75 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| ALGONQUIN POWER CORP INC | PEMBROKE HYDRO | 20560 20560-S01 | 3172.75 | 237.25 | 202.85 | 391.62 | 743.86 | 594.74 | 270.34 | 79.41 | 223.00 | 133.91 | 432.52 | 441.75 | 717.48 | |
| ALGONQUIN POWER CORP INC | PEMBROKE HYDRO | 20560 20560-D01 | 3172.75 | (237.25) | (202.85) | (391.62) | (743.86) | (594.74) | (270.34) | (79.41) | (223.00) | (133.91) | (432.52) | (441.75) | (717.48) | |
| TIMCO INC | SAWMILL | 20536 20536-S01 | 3172.75 | | | | | | | | | | | | | |
| TIMCO INC | SAWMILL | 20536 20536-D01 | 3172.75 | | | | | | | | | | | | | |
| AGGREGATE INDUSTRIES | PUMP STATION | 20532 20532-S01 | 3172.75 | 0.00 | 0.01 | 0.01 | 0.02 | 0.02 | 0.03 | 0.02 | 0.02 | 0.02 | 0.02 | 0.03 | 0.02 | 0.02 |
| PITTSFIELD AQUEDUCT CO | WATER WORKS | 20481 20481-S01 | 3172.75 | 0.28 | 0.24 | 0.26 | 0.26 | 0.26 | 0.26 | 0.29 | 0.27 | 0.28 | 0.26 | 0.26 | 0.25 | 0.25 |
| AGGREGATE INDUSTRIES | MANCHESTER PLANT | 20473 20473-S01 | 3172.75 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.66 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| AGGREGATE INDUSTRIES | MANCHESTER PLANT | 20473 20473-D01 | 3172.75 | | | | | | | | | | | | | |
| ELLIOT HOSPITAL | | 20453 20076-D01 | 3172.75 | (0.10) | (0.11) | (0.10) | (0.16) | (0.17) | (0.23) | (0.28) | (0.20) | (0.19) | (0.14) | (0.10) | (0.12) | |
| ELLIOT HOSPITAL | | 20453 20009-S01 | 3172.75 | 0.10 | 0.11 | 0.10 | 0.16 | 0.17 | 0.23 | 0.28 | 0.20 | 0.19 | 0.14 | 0.10 | 0.12 | |
| HOOKSETT WWTF | WASTE WATER TREAT PLANT | 20331 20331-D01 | 3172.75 | (1.02) | (1.02) | (1.45) | (1.49) | (1.29) | (1.26) | (1.15) | (1.34) | (1.28) | (1.25) | (1.22) | (1.27) | |
| EPSOM VIL WATER DIST | WATER WORKS | 20312 20312-S02 | 3172.75 | 0.14 | 0.16 | 0.15 | 0.13 | 0.11 | 0.13 | 0.15 | 0.13 | 0.11 | 0.22 | 0.10 | 0.11 | |
| EPSOM VIL WATER DIST | WATER WORKS | 20312 20312-S01 | 3172.75 | 0.08 | 0.09 | 0.08 | 0.08 | 0.06 | 0.08 | 0.10 | 0.08 | 0.06 | 0.06 | 0.07 | 0.07 | |
| TIMCO INC | COGENERATION PLANT | 20302 20302-S02 | 3172.75 | 0.00 | 0.00 | 0.00 | | | | | | | | | | |
| TIMCO INC | COGENERATION PLANT | 20302 20302-S01 | 3172.75 | 0.02 | 0.02 | 0.02 | | | | | | | | | | |
| TIMCO INC | COGENERATION PLANT | 20302 20302-D01 | 3172.75 | 0.00 | 0.00 | 0.00 | | | | | | | | | | |
| ALLENSTOWN SEWER COMM | SUNCOOK POTW | 20280 20280-D01 | 3172.75 | (0.88) | (0.89) | (1.67) | (1.79) | (1.34) | (1.09) | (0.80) | (0.92) | (0.88) | (0.92) | (0.98) | (1.24) | |
| PLOURDE SAND & GRAVEL CO | | 20263 20263-D01 | 3172.75 | 0.19 | 0.19 | 0.96 | 1.54 | 1.46 | 1.63 | 1.77 | 1.75 | 1.42 | 1.85 | 1.64 | 1.34 | |
| PLOURDE SAND & GRAVEL CO | | 20263 20263-S01 | 3172.75 | | | | | | | | | | | | | |
| PITTSFIELD HYDROPOWER CO | PITTSFIELD DAM | 20262 20262-S01 | 3172.75 | 55.68 | 0.00 | 0.19 | 224.57 | 146.22 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| PITTSFIELD HYDROPOWER CO | PITTSFIELD DAM | 20262 20262-D01 | 3172.75 | (55.68) | 0.00 | (0.19) | (224.57) | (146.22) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| PIKE INDUSTRIES INC | HOOKSETT PLANT | 20258 20258-S01 | 3172.75 | 0.00 | 0.00 | 0.00 | 0.04 | 0.10 | 0.09 | 0.13 | 0.15 | 0.14 | 0.10 | 0.10 | 0.02 | |
| PIKE INDUSTRIES INC | HOOKSETT PLANT | 20258 20258-D01 | 3172.75 | | | | | | | | | | | | | |
| HODGSON THOMAS AND SONS | CHINA MILLS DAM | 20247 20247-S01 | 3172.75 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 7.88 | 176.39 |
| HODGSON THOMAS AND SONS | CHINA MILLS DAM | 20247 20247-D01 | 3172.75 | | | | | | | | | | | | | |
| MANCHESTER SAND & GRAVEL | | 20244 20244-S01 | 3172.75 | 0.00 | 0.00 | 0.00 | 0.00 | 0.88 | 1.36 | 1.26 | 1.29 | 1.06 | 1.13 | 0.72 | 0.00 | |
| MANCHESTER SAND & GRAVEL | | 20244 20244-D01 | 3172.75 | | | | | | | | | | | | | |
| MANCHESTER COUNTRY CLUB | MANCHESTER COUNTRY CLUB | 20243 20243-S01 | 3172.75 | 0.00 | 0.00 | 0.00 | 0.04 | 0.10 | 0.21 | 0.63 | 0.23 | 0.23 | 0.20 | 0.00 | 0.00 | 0.00 |
| MANCHESTER COUNTRY CLUB | MANCHESTER COUNTRY CLUB | 20243 20243-D01 | 3172.75 | | | | | | | | | | | | | |
| BROX INDUSTRIES INC | HOOKSETT PLANT | 20169 20169-S01 | 3172.75 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | | | | | |
| BROX INDUSTRIES INC | HOOKSETT PLANT | 20169 20169-D01 | 3172.75 | 0.00 | 0.00 | 0.00 | | | | | | | | | | |
| PUBLIC SERVICE CO OF NH | HOOKSETT HYDRO | 20148 20148-S01 | 3172.75 | 1448.11 | 1380.04 | 1144.88 | 708.59 | 1082.99 | 1078.35 | 272.29 | 1069.07 | 889.60 | 1200.17 | 1166.54 | 725.60 | |
| PUBLIC SERVICE CO OF NH | HOOKSETT HYDRO | 20148 20148-D01 | 3172.75 | (1448.11) | (1380.04) | (1144.88) | (708.59) | (1082.99) | (1078.35) | (272.29) | (1069.07) | (889.60) | (1200.17) | (1166.54) | (725.60) | |
| PUBLIC SERVICE CO OF NH | AMOSKEAG HYDRO | 20143 20143-S01 | 3172.75 | 2640.95 | 2113.38 | 3326.33 | 4902.85 | 4627.46 | 3464.02 | 980.88 | 3298.48 | 2438.28 | 3751.79 | 5040.55 | 4500.60 | |
| PUBLIC SERVICE CO OF NH | AMOSKEAG HYDRO | 20143 20143-D01 | 3172.75 | (2640.95) | (2113.38) | (3326.33) | (4902.85) | (4627.46) | (3464.02) | (980.88) | (3298.48) | (2438.28) | (3751.79) | (5040.55) | (4500.60) | |
| NYLON CORP OF AMERICA | | 20138 20138-S02 | 3172.75 | 0.43 | 0.95 | 0.69 | 1.05 | 0.73 | 1.16 | 1.16 | 1.84 | 1.22 | 1.67 | 0.62 | 1.11 | |
| NYLON CORP OF AMERICA | | 20138 20138-D02 | 3172.75 | (0.31) | (0.91) | (0.65) | (0.94) | (0.63) | (1.04) | (1.20) | (1.58) | (0.80) | (1.72) | (0.59) | (0.97) | |
| LOCKE KENT D SR | | 20117 20117-D01 | 3172.75 | | | | | | | | | | | | | |
| PITTSFIELD WWTF | WASTE WATER TREAT PLANT | 20094 20094-D01 | 3172.75 | (0.32) | (0.33) | (0.56) | (0.64) | (0.40) | (0.32) | (0.33) | (0.37) | (0.29) | (0.32) | (0.25) | (0.43) | |
| MANCHESTER WWTF | MANCHESTER POTW | 20076 | | | | | | | | | | | | | | |

| 2003 Lower Merrimack Aggregate Water Use in CFS | | | DA on DR (SQ MILE) | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
|---|-----------------------------|-----------------|--------------------|--------|---------|---------|---------|---------|--------|-------|-------|-------|--------|--------|--------|
| WU_NAME | FACILITY | WUSD_ID | | | | | | | | | | | | | |
| Start of designated reach | | | 3172.75 | (5.06) | (8.28) | (39.55) | (36.75) | (17.72) | 0.78 | 29.42 | 3.85 | 7.07 | (3.57) | (2.13) | 157.30 |
| LONDONDERRY COUNTRY CLUB | | 20240 20240-S01 | 3178.20 | (5.06) | (8.28) | (39.55) | (36.73) | (17.68) | 0.80 | 29.51 | 3.90 | 7.10 | (3.55) | (2.13) | 157.30 |
| DERRY WWTF | WASTE WATER TREAT PLANT | 20101 20101-D01 | 3178.36 | (7.62) | (10.60) | (43.00) | (40.57) | (20.43) | (1.82) | 27.53 | 1.69 | 5.03 | (5.71) | (4.55) | 154.52 |
| MERRIMACK VILLAGE DIST | WATER WORKS | 20504 20504-S05 | 3184.60 | (7.04) | (10.03) | (42.37) | (39.93) | (19.83) | (0.92) | 28.59 | 2.48 | 5.79 | (5.15) | (3.95) | 155.14 |
| MERRIMACK VILLAGE DIST | WATER WORKS | 20504 20504-S04 | 3184.60 | (6.84) | (9.84) | (42.15) | (39.71) | (19.65) | (0.64) | 28.92 | 2.72 | 6.02 | (4.99) | (3.76) | 155.33 |
| Souhegan DR | Sum of Souhegan Water Use | | 3404.32 | (6.96) | (10.06) | (43.73) | (41.11) | (20.14) | (0.45) | 30.77 | 3.91 | 6.91 | (4.77) | (4.04) | 155.05 |
| PASSACONAWAY COUNTRY CLUB | GOLF COURSE | 20476 20476-S01 | 3404.38 | (6.96) | (10.06) | (43.73) | (41.11) | (20.14) | (0.45) | 30.77 | 3.91 | 6.92 | (4.77) | (4.04) | 155.05 |
| JONES CHEMICAL INC | MERRIMACK PLANT | 20156 20156-S01 | 3404.38 | (6.95) | (10.05) | (43.73) | (41.11) | (20.14) | (0.45) | 30.78 | 3.92 | 6.92 | (4.77) | (4.03) | 155.05 |
| JONES CHEMICAL INC | MERRIMACK PLANT | 20156 20156-D01 | 3404.38 | (6.96) | (10.05) | (43.73) | (41.12) | (20.15) | (0.46) | 30.76 | 3.90 | 6.90 | (4.78) | (4.05) | 155.04 |
| Naticook Brook | Naticook Brook | | 3410.66 | (5.88) | (9.00) | (42.84) | (39.50) | (17.76) | 2.14 | 33.60 | 6.02 | 8.81 | (3.24) | (3.24) | 155.78 |
| TOWN OF LONDONDERRY | CONTINENTAL PARK | 20756 20756-S01 | 3420.85 | (5.88) | (9.00) | (42.84) | (39.50) | (17.74) | 2.18 | 33.63 | 6.05 | 8.84 | (3.23) | (3.24) | 155.78 |
| WILSON FARM OF NH | WILSON FARM | 20307 20307-S01 | 3420.85 | (5.88) | (9.00) | (42.84) | (39.50) | (17.74) | 2.18 | 33.63 | 6.05 | 8.84 | (3.23) | (3.24) | 155.78 |
| WILSON FARM OF NH | WILSON FARM | 20307 20307-S04 | 3421.90 | (5.88) | (9.00) | (42.84) | (39.50) | (17.74) | 2.18 | 33.63 | 6.05 | 8.84 | (3.23) | (3.24) | 155.78 |
| WILSON FARM OF NH | WILSON FARM | 20307 20307-S02 | 3421.90 | (5.88) | (9.00) | (42.84) | (39.50) | (17.74) | 2.18 | 33.72 | 6.05 | 8.84 | (3.23) | (3.24) | 155.78 |
| ANHEUSER-BUSCH INC | MERRIMACK BREWERY | 20308 20308-S01 | 3422.21 | (2.88) | (6.11) | (40.13) | (36.39) | (14.13) | 5.81 | 37.12 | 9.70 | 12.07 | (0.07) | (0.18) | 158.52 |
| ANHEUSER-BUSCH INC | MERRIMACK BREWERY | 20308 20308-D03 | 3422.21 | (2.88) | (6.11) | (40.13) | (36.39) | (14.17) | 5.73 | 36.87 | 9.58 | 11.96 | (0.11) | (0.18) | 158.52 |
| ANHEUSER-BUSCH INC | MERRIMACK BREWERY | 20308 20308-S02 | 3422.21 | (2.88) | (6.11) | (40.13) | (36.39) | (14.17) | 5.73 | 36.87 | 9.58 | 11.96 | (0.11) | (0.18) | 158.52 |
| PENNICHUCK WATER WORKS | WATER WORKS | 20030 20030-S02 | 3422.50 | (2.88) | (6.11) | (40.13) | (36.39) | (14.17) | 5.73 | 49.56 | 9.58 | 14.44 | (0.11) | (0.18) | 158.52 |
| D'CHARME SAND & GRAVEL | | 20675 20675-S01 | 3431.78 | (2.88) | (6.11) | (40.13) | (36.39) | (14.17) | 5.73 | 49.56 | 9.58 | 14.44 | (0.11) | (0.18) | 158.52 |
| WILSON FARM OF NH | WILSON FARM | 20307 20307-S03 | 3431.78 | (2.88) | (6.11) | (40.13) | (36.39) | (14.17) | 5.74 | 49.76 | 9.59 | 14.47 | (0.11) | (0.18) | 158.52 |
| RODONIS FARM ENTERPRISES | RODONIS FARM | 20680 20680-S01 | 3432.70 | (2.88) | (6.11) | (40.13) | (36.39) | (14.17) | 5.74 | 49.76 | 9.59 | 14.47 | (0.11) | (0.18) | 158.52 |
| NASHUA CORPORATION | NASHUA SPECIALITY DIVISION | 20276 20276-D02 | 3432.70 | (2.90) | (6.13) | (40.14) | (36.41) | (14.19) | 5.72 | 49.75 | 9.58 | 14.45 | (0.13) | (0.19) | 158.51 |
| MERRIMACK WWTF | WASTE WATER TREAT PLANT | 20091 20091-D01 | 3432.70 | (7.41) | (10.14) | (44.69) | (41.21) | (18.92) | 1.01 | 45.26 | 4.83 | 9.96 | (4.53) | (4.40) | 154.25 |
| Pennichuck Brook | Pennichuck Brook | | 3458.54 | 11.08 | 7.12 | (26.84) | (23.22) | 1.70 | 25.52 | 79.34 | 32.45 | 35.76 | 18.26 | 14.02 | 172.83 |
| RODONIS FARM ENTERPRISES | RODONIS FARM | 20680 20680-S02 | 3459.05 | 11.08 | 7.12 | (26.84) | (23.22) | 1.70 | 25.52 | 79.34 | 32.45 | 35.76 | 18.26 | 14.02 | 172.83 |
| Nashua River | Nashua River | | 3998.72 | 11.14 | 7.18 | (26.77) | (23.15) | 1.82 | 25.71 | 79.65 | 32.74 | 35.96 | 18.35 | 14.09 | 172.89 |
| Glover Brook to First Brook | Glover Brook to First Brook | | 4003.96 | 11.15 | 7.18 | (26.76) | (22.91) | 2.09 | 25.99 | 79.92 | 33.01 | 36.23 | 18.62 | 14.31 | 172.92 |
| Salmon Brook | Salmon Brook | | 4040.52 | 11.15 | 7.18 | (26.76) | (22.89) | 2.19 | 26.09 | 80.22 | 33.29 | 36.32 | 18.66 | 14.31 | 172.92 |
| NASHUA WWTF | NASHUA POTW | 20077 20077-D01 | 4040.57 | (8.91) | (11.65) | (50.07) | (50.05) | (21.08) | 3.72 | 62.67 | 14.84 | 19.12 | 1.11 | 33.01 | 193.44 |
| NASHUA COUNTRY CLUB | NASHUA COUNTRY CLUB | 20684 20684-S01 | 4041.77 | (8.91) | (11.65) | (50.07) | (50.04) | (21.05) | 3.82 | 63.02 | 14.97 | 19.31 | 1.11 | 33.01 | 193.44 |
| GREEN MEADOW GOLF CLUB IN | GREEN MEADOW GOLF CLUB IN | 20227 20227-S01 | 4045.47 | (8.91) | (11.65) | (50.07) | (50.04) | (21.05) | 4.12 | 64.01 | 15.45 | 19.48 | 1.17 | 33.01 | 193.44 |
| HAMPSHIRE CHEMICAL CORP | HAMPSHIRE CHEMICAL | 20125 20125-D01 | 4045.47 | (9.12) | (11.89) | (50.26) | (50.28) | (21.29) | 3.99 | 63.79 | 15.22 | 19.24 | 0.87 | 32.75 | 193.16 |
| end of DR | NH/ Mass Border | | 4046.27 | (9.12) | (11.89) | (50.26) | (50.28) | (21.29) | 3.99 | 63.79 | 15.22 | 19.24 | 0.87 | 32.75 | 193.16 |

USGS 01092000 MERRIMACK R NR GOFFS

DA(mi^2) 3092

7Q10 (cfs) 637

| | Mean of daily streamflows (2003) in cfs | Mean of monthly streamflows (POR) in ft3/s | Median of monthly means (cfs) | Calculated Monthly mean CFSM | General Standard in cfsm |
|--------|--|--|-------------------------------------|------------------------------------|--------------------------------|
| Jan-03 | 2981.3 | 4496 | 4358 | 0.96 | 0.02 |
| Feb-03 | 2545.0 | 4707 | 3912.5 | 0.82 | 0.02 |
| Mar-03 | 8555.2 | 7983 | 7431 | 2.77 | 0.04 |
| Apr-03 | 14060.0 | 13974 | 13840 | 4.55 | 0.16 |
| May-03 | 8352.6 | 8625 | 8359.5 | 2.70 | 0.04 |
| Jun-03 | 4194.7 | 4536 | 3900 | 1.36 | 0.04 |
| Jul-03 | 1326.3 | 2444 | 1981 | 0.43 | 0.0103 |
| Aug-03 | 4838.7 | 1940 | 1563.5 | 1.56 | 0.04 |
| Sep-03 | 2998.7 | 2086 | 1568 | 0.97 | 0.02 |
| Oct-03 | 6176.5 | 3008 | 2219 | 2.00 | 0.04 |
| Nov-03 | 8751.7 | 4650 | 3987 | 2.83 | 0.04 |
| Dec-03 | 12789.7 | 5232 | 4400 | 4.14 | 0.16 |

2003 daily data availability

100.0% = number of days with data in 2003 / 365 days

| |
|--|
| Using POR average streamflow for this month |
| Using interpolated values or POR average daily |

2003 Lower Merrimack Estimated Monthly Stream Flow at Each Impact Point in CFS

| WU_NAME | FACILITY | WUSD_ID | DA on DR (SQ MILE) | USGS 01092000 MERRIMACK R NR GOFFS FALLS, BELOW MANCHESTER, NH | | | | | | | | | | | |
|-----------------------------|-----------------------------|-----------------|--------------------|--|------|-------|-------|-------|------|------|------|------|------|-------|-------|
| | | | | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
| | | | 3092 | 0.96 | 0.82 | 2.77 | 4.55 | 2.70 | 1.36 | 0.43 | 1.56 | 0.97 | 2.00 | 2.83 | 4.14 |
| Start of designated reach | | | 3172.75 | 3059 | 2611 | 8779 | 14427 | 8571 | 4304 | 1361 | 4965 | 3077 | 6338 | 8980 | 13124 |
| LONDONDERRY COUNTRY CLUB | | 20240 20240-S01 | 3178.20 | 3064 | 2616 | 8794 | 14452 | 8585 | 4312 | 1363 | 4974 | 3082 | 6349 | 8996 | 13146 |
| DERRY WWTF | WASTE WATER TREAT PLANT | 20101 20101-D01 | 3178.36 | 3065 | 2616 | 8794 | 14453 | 8586 | 4312 | 1363 | 4974 | 3082 | 6349 | 8996 | 13147 |
| MERRIMACK VILLAGE DIST | WATER WORKS | 20504 20504-S05 | 3184.60 | 3071 | 2621 | 8811 | 14481 | 8603 | 4320 | 1366 | 4984 | 3088 | 6361 | 9014 | 13173 |
| MERRIMACK VILLAGE DIST | WATER WORKS | 20504 20504-S04 | 3184.60 | 3071 | 2621 | 8811 | 14481 | 8603 | 4320 | 1366 | 4984 | 3088 | 6361 | 9014 | 13173 |
| Souhegan DR | Sum of Souhegan Water Use | | 3404.32 | 3282 | 2802 | 9419 | 15480 | 9196 | 4618 | 1460 | 5327 | 3302 | 6800 | 9636 | 14082 |
| PASSACONAWAY COUNTRY CLUB | GOLF COURSE | 20476 20476-S01 | 3404.38 | 3282 | 2802 | 9419 | 15480 | 9196 | 4618 | 1460 | 5328 | 3302 | 6800 | 9636 | 14082 |
| JONES CHEMICAL INC | MERRIMACK PLANT | 20156 20156-S01 | 3404.38 | 3282 | 2802 | 9419 | 15480 | 9196 | 4618 | 1460 | 5328 | 3302 | 6800 | 9636 | 14082 |
| JONES CHEMICAL INC | MERRIMACK PLANT | 20156 20156-D01 | 3404.38 | 3282 | 2802 | 9419 | 15480 | 9196 | 4618 | 1460 | 5328 | 3302 | 6800 | 9636 | 14082 |
| Naticook Brook | Naticook Brook | | 3410.66 | 3289 | 2807 | 9437 | 15509 | 9213 | 4627 | 1463 | 5337 | 3308 | 6813 | 9654 | 14108 |
| TOWN OF LONDONDERRY | CONTINENTAL PARK | 20756 20756-S01 | 3420.85 | 3298 | 2816 | 9465 | 15555 | 9241 | 4641 | 1467 | 5353 | 3318 | 6833 | 9682 | 14150 |
| WILSON FARM OF NH | WILSON FARM | 20307 20307-S01 | 3420.85 | 3298 | 2816 | 9465 | 15555 | 9241 | 4641 | 1467 | 5353 | 3318 | 6833 | 9682 | 14150 |
| WILSON FARM OF NH | WILSON FARM | 20307 20307-S04 | 3421.90 | 3299 | 2817 | 9468 | 15560 | 9244 | 4642 | 1468 | 5355 | 3319 | 6835 | 9685 | 14154 |
| WILSON FARM OF NH | WILSON FARM | 20307 20307-S02 | 3421.90 | 3299 | 2817 | 9468 | 15560 | 9244 | 4642 | 1468 | 5355 | 3319 | 6835 | 9685 | 14154 |
| ANHEUSER-BUSCH INC | MERRIMACK BREWERY | 20308 20308-S01 | 3422.21 | 3300 | 2817 | 9469 | 15562 | 9245 | 4643 | 1468 | 5355 | 3319 | 6836 | 9686 | 14156 |
| ANHEUSER-BUSCH INC | MERRIMACK BREWERY | 20308 20308-D03 | 3422.21 | 3300 | 2817 | 9469 | 15562 | 9245 | 4643 | 1468 | 5355 | 3319 | 6836 | 9686 | 14156 |
| ANHEUSER-BUSCH INC | MERRIMACK BREWERY | 20308 20308-D01 | 3422.21 | 3300 | 2817 | 9469 | 15562 | 9245 | 4643 | 1468 | 5355 | 3319 | 6836 | 9686 | 14156 |
| PENNICHUCK WATER WORKS | WATER WORKS | 20030 20030-S02 | 3422.50 | 3300 | 2817 | 9470 | 15563 | 9245 | 4643 | 1468 | 5356 | 3319 | 6837 | 9687 | 14157 |
| DUCHARME SAND & GRAVEL | | 20675 20675-S01 | 3431.78 | 3309 | 2825 | 9495 | 15605 | 9270 | 4656 | 1472 | 5370 | 3328 | 6855 | 9713 | 14195 |
| WILSON FARM OF NH | WILSON FARM | 20307 20307-S03 | 3431.78 | 3309 | 2825 | 9495 | 15605 | 9270 | 4656 | 1472 | 5370 | 3328 | 6855 | 9713 | 14195 |
| RODONIS FARM ENTERPRISES | RODONIS FARM | 20680 20680-S01 | 3432.70 | 3310 | 2825 | 9498 | 15609 | 9273 | 4657 | 1472 | 5372 | 3329 | 6857 | 9716 | 14199 |
| NASHUA CORPORATION | NASHUA SPECIALITY DIVISION | 20276 20276-D02 | 3432.70 | 3310 | 2825 | 9498 | 15609 | 9273 | 4657 | 1472 | 5372 | 3329 | 6857 | 9716 | 14199 |
| MERRIMACK WWTF | WASTE WATER TREAT PLANT | 20091 20091-D01 | 3432.70 | 3310 | 2825 | 9498 | 15609 | 9273 | 4657 | 1472 | 5372 | 3329 | 6857 | 9716 | 14199 |
| Pennichuck Brook | Pennichuck Brook | | 3458.54 | 3335 | 2847 | 9569 | 15727 | 9343 | 4692 | 1484 | 5412 | 3354 | 6909 | 9789 | 14306 |
| RODONIS FARM ENTERPRISES | RODONIS FARM | 20680 20680-S02 | 3459.05 | 3335 | 2847 | 9571 | 15729 | 9344 | 4693 | 1484 | 5413 | 3355 | 6910 | 9791 | 14308 |
| Nashua River | Nashua River | | 3998.72 | 3856 | 3291 | 11064 | 18183 | 10802 | 5425 | 1715 | 6258 | 3878 | 7988 | 11318 | 16540 |
| Glover Brook to First Brook | Glover Brook to First Brook | | 4003.96 | 3861 | 3296 | 11078 | 18207 | 10816 | 5432 | 1718 | 6266 | 3883 | 7998 | 11333 | 16562 |
| Salmon Brook | Salmon Brook | | 4040.52 | 3896 | 3326 | 11180 | 18373 | 10915 | 5481 | 1733 | 6323 | 3919 | 8071 | 11436 | 16713 |
| NASHUA WWTF | NASHUA POTW | 20077 20077-D01 | 4040.57 | 3896 | 3326 | 11180 | 18373 | 10915 | 5482 | 1733 | 6323 | 3919 | 8071 | 11437 | 16713 |
| NASHUA COUNTRY CLUB | NASHUA COUNTRY CLUB | 20684 20684-S01 | 4041.77 | 3897 | 3327 | 11183 | 18379 | 10918 | 5483 | 1734 | 6325 | 3920 | 8074 | 11440 | 16718 |
| GREEN MEADOW GOLF CLUB IN | GREEN MEADOW GOLF CLUB IN | 20227 20227-S01 | 4045.47 | 3901 | 3330 | 11193 | 18396 | 10928 | 5488 | 1735 | 6331 | 3923 | 8081 | 11450 | 16734 |
| HAMPSHIRE CHEMICAL CORP | HAMPSHIRE CHEMICAL | 20125 20125-D01 | 4045.47 | 3901 | 3330 | 11193 | 18396 | 10928 | 5488 | 1735 | 6331 | 3923 | 8081 | 11450 | 16734 |
| end of DR | NH/ Mass Border | | 4046.27 | 3901 | 3330 | 11196 | 18399 | 10930 | 5489 | 1736 | 6332 | 3924 | 8083 | 11453 | 16737 |

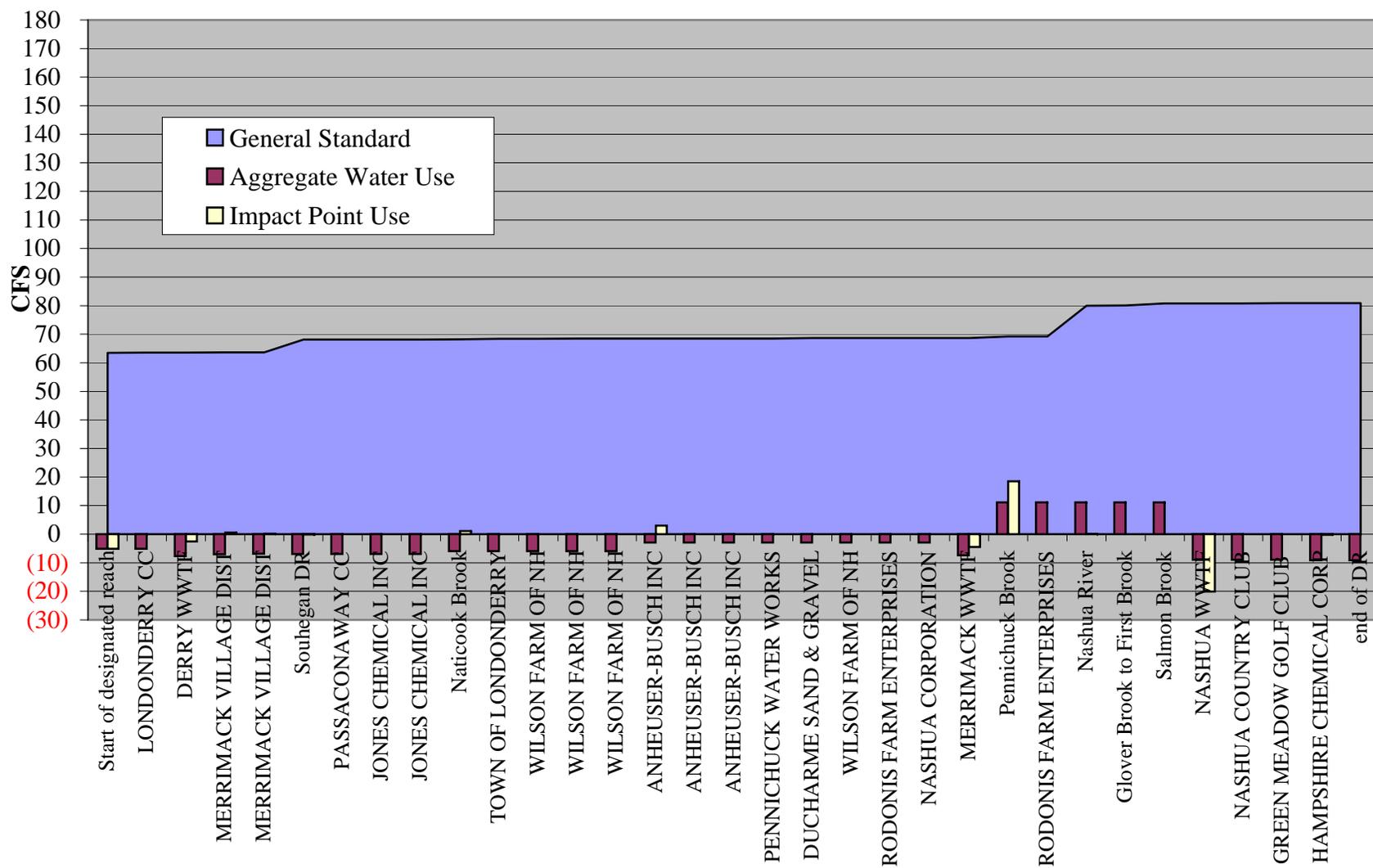
2003 Lower Merrimack Estimated Monthly General Standard at Each Impact Point in CFS

| | | USGS 01092000 MERRIMACK R NR GOFFS FALLS, BELOW MANCHESTER, NH | | General Standard in cfsm | | | | | | | | | | | | |
|-----------------------------|----------------------------|--|--------------------|--------------------------|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| | | | | 3092 | 0.02 | 0.02 | 0.04 | 0.16 | 0.04 | 0.04 | 0.0103 | 0.04 | 0.02 | 0.04 | 0.04 | 0.16 |
| WU_NAME | FACILITY | WUSD_ID | DA on DR (SQ MILE) | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | |
| Start of designated reach | | | | 3172.75 | 63.45 | 63.45 | 126.91 | 507.64 | 126.91 | 126.91 | 32.68 | 126.91 | 63.45 | 126.91 | 126.91 | 507.64 |
| LONDONDERRY COUNTRY CLUB | | 20240 20240-S01 | 3178.20 | 63.56 | 63.56 | 127.13 | 508.51 | 127.13 | 127.13 | 32.74 | 127.13 | 63.56 | 127.13 | 127.13 | 508.51 | |
| DERRY WWTF | WASTE WATER TREAT PLANT | 20101 20101-D01 | 3178.36 | 63.57 | 63.57 | 127.13 | 508.54 | 127.13 | 127.13 | 32.74 | 127.13 | 63.57 | 127.13 | 127.13 | 508.54 | |
| MERRIMACK VILLAGE DIST | WATER WORKS | 20504 20504-S05 | 3184.60 | 63.69 | 63.69 | 127.38 | 509.54 | 127.38 | 127.38 | 32.80 | 127.38 | 63.69 | 127.38 | 127.38 | 509.54 | |
| MERRIMACK VILLAGE DIST | WATER WORKS | 20504 20504-S04 | 3184.60 | 63.69 | 63.69 | 127.38 | 509.54 | 127.38 | 127.38 | 32.80 | 127.38 | 63.69 | 127.38 | 127.38 | 509.54 | |
| Souhegan DR | | | | 3404.32 | 68.09 | 68.09 | 136.17 | 544.69 | 136.17 | 35.07 | 136.17 | 68.09 | 136.17 | 136.17 | 544.69 | |
| PASSACONAWAY COUNTRY CLUB | GOLF COURSE | 20476 20476-S01 | 3404.38 | 68.09 | 68.09 | 136.18 | 544.70 | 136.18 | 136.18 | 35.07 | 136.18 | 68.09 | 136.18 | 136.18 | 544.70 | |
| JONES CHEMICAL INC | MERRIMACK PLANT | 20156 20156-S01 | 3404.38 | 68.09 | 68.09 | 136.18 | 544.70 | 136.18 | 136.18 | 35.07 | 136.18 | 68.09 | 136.18 | 136.18 | 544.70 | |
| JONES CHEMICAL INC | MERRIMACK PLANT | 20156 20156-D01 | 3404.38 | 68.09 | 68.09 | 136.18 | 544.70 | 136.18 | 136.18 | 35.07 | 136.18 | 68.09 | 136.18 | 136.18 | 544.70 | |
| Naticook Brook | | | | 3410.66 | 68.21 | 68.21 | 136.43 | 545.71 | 136.43 | 35.13 | 136.43 | 68.21 | 136.43 | 136.43 | 545.71 | |
| TOWN OF LONDONDERRY | CONTINENTAL PARK | 20756 20756-S01 | 3420.85 | 68.42 | 68.42 | 136.83 | 547.34 | 136.83 | 136.83 | 35.24 | 136.83 | 68.42 | 136.83 | 136.83 | 547.34 | |
| WILSON FARM OF NH | WILSON FARM | 20307 20307-S01 | 3420.85 | 68.42 | 68.42 | 136.83 | 547.34 | 136.83 | 136.83 | 35.24 | 136.83 | 68.42 | 136.83 | 136.83 | 547.34 | |
| WILSON FARM OF NH | WILSON FARM | 20307 20307-S04 | 3421.90 | 68.44 | 68.44 | 136.88 | 547.50 | 136.88 | 136.88 | 35.25 | 136.88 | 68.44 | 136.88 | 136.88 | 547.50 | |
| WILSON FARM OF NH | WILSON FARM | 20307 20307-S02 | 3421.90 | 68.44 | 68.44 | 136.88 | 547.50 | 136.88 | 136.88 | 35.25 | 136.88 | 68.44 | 136.88 | 136.88 | 547.50 | |
| ANHEUSER-BUSCH INC | MERRIMACK BREWERY | 20308 20308-S01 | 3422.21 | 68.44 | 68.44 | 136.89 | 547.55 | 136.89 | 136.89 | 35.25 | 136.89 | 68.44 | 136.89 | 136.89 | 547.55 | |
| ANHEUSER-BUSCH INC | MERRIMACK BREWERY | 20308 20308-D03 | 3422.21 | 68.44 | 68.44 | 136.89 | 547.55 | 136.89 | 136.89 | 35.25 | 136.89 | 68.44 | 136.89 | 136.89 | 547.55 | |
| ANHEUSER-BUSCH INC | MERRIMACK BREWERY | 20308 20308-D01 | 3422.21 | 68.44 | 68.44 | 136.89 | 547.55 | 136.89 | 136.89 | 35.25 | 136.89 | 68.44 | 136.89 | 136.89 | 547.55 | |
| PENNICHUCK WATER WORKS | WATER WORKS | 20030 20030-S02 | 3422.50 | 68.45 | 68.45 | 136.90 | 547.60 | 136.90 | 136.90 | 35.25 | 136.90 | 68.45 | 136.90 | 136.90 | 547.60 | |
| DUCHARME SAND & GRAVEL | | | | 20675 20675-S01 | 3431.78 | 68.64 | 68.64 | 137.27 | 549.09 | 137.27 | 35.35 | 137.27 | 68.64 | 137.27 | 137.27 | 549.09 |
| WILSON FARM OF NH | WILSON FARM | 20307 20307-S03 | 3431.78 | 68.64 | 68.64 | 137.27 | 549.09 | 137.27 | 137.27 | 35.35 | 137.27 | 68.64 | 137.27 | 137.27 | 549.09 | |
| RODONIS FARM ENTERPRISES | RODONIS FARM | 20680 20680-S01 | 3432.70 | 68.65 | 68.65 | 137.31 | 549.23 | 137.31 | 137.31 | 35.36 | 137.31 | 68.65 | 137.31 | 137.31 | 549.23 | |
| NASHUA CORPORATION | NASHUA SPECIALITY DIVISION | 20276 20276-D02 | 3432.70 | 68.65 | 68.65 | 137.31 | 549.23 | 137.31 | 137.31 | 35.36 | 137.31 | 68.65 | 137.31 | 137.31 | 549.23 | |
| MERRIMACK WWTF | WASTE WATER TREAT PLANT | 20091 20091-D01 | 3432.70 | 68.65 | 68.65 | 137.31 | 549.23 | 137.31 | 137.31 | 35.36 | 137.31 | 68.65 | 137.31 | 137.31 | 549.23 | |
| Pennichuck Brook | | | | 3458.54 | 69.17 | 69.17 | 138.34 | 553.37 | 138.34 | 35.63 | 138.34 | 69.17 | 138.34 | 138.34 | 553.37 | |
| RODONIS FARM ENTERPRISES | RODONIS FARM | 20680 20680-S02 | 3459.05 | 69.18 | 69.18 | 138.36 | 553.45 | 138.36 | 138.36 | 35.63 | 138.36 | 69.18 | 138.36 | 138.36 | 553.45 | |
| Nashua River | | | | 3998.72 | 79.97 | 79.97 | 159.95 | 639.79 | 159.95 | 41.19 | 159.95 | 79.97 | 159.95 | 159.95 | 639.79 | |
| Glover Brook to First Brook | | | | 4003.96 | 80.08 | 80.08 | 160.16 | 640.63 | 160.16 | 41.24 | 160.16 | 80.08 | 160.16 | 160.16 | 640.63 | |
| Salmon Brook | | | | 4040.52 | 80.81 | 80.81 | 161.62 | 646.48 | 161.62 | 41.62 | 161.62 | 80.81 | 161.62 | 161.62 | 646.48 | |
| NASHUA WWTF | NASHUA POTW | 20077 20077-D01 | 4040.57 | 80.81 | 80.81 | 161.62 | 646.49 | 161.62 | 161.62 | 41.62 | 161.62 | 80.81 | 161.62 | 161.62 | 646.49 | |
| NASHUA COUNTRY CLUB | NASHUA COUNTRY CLUB | 20684 20684-S01 | 4041.77 | 80.84 | 80.84 | 161.67 | 646.68 | 161.67 | 161.67 | 41.63 | 161.67 | 80.84 | 161.67 | 161.67 | 646.68 | |
| GREEN MEADOW GOLF CLUB IN | GREEN MEADOW GOLF CLUB IN | 20227 20227-S01 | 4045.47 | 80.91 | 80.91 | 161.82 | 647.27 | 161.82 | 161.82 | 41.67 | 161.82 | 80.91 | 161.82 | 161.82 | 647.27 | |
| HAMPSHIRE CHEMICAL CORP | HAMPSHIRE CHEMICAL | 20125 20125-D01 | 4045.47 | 80.91 | 80.91 | 161.82 | 647.27 | 161.82 | 161.82 | 41.67 | 161.82 | 80.91 | 161.82 | 161.82 | 647.27 | |
| end of DR | | | | 4046.27 | 80.93 | 80.93 | 161.85 | 647.40 | 161.85 | 41.68 | 161.85 | 80.93 | 161.85 | 161.85 | 647.40 | |

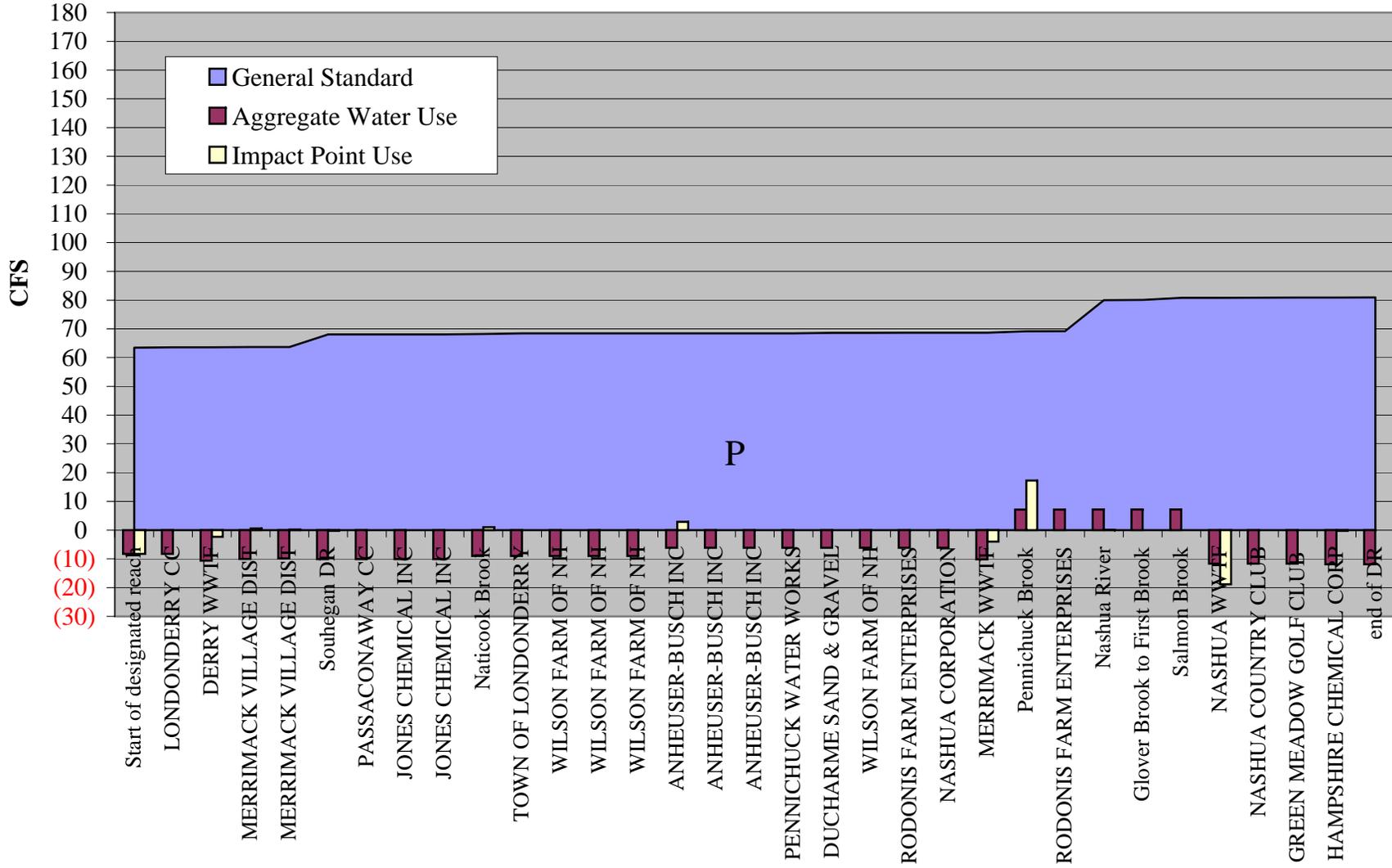
2003 Lower Merrimack Estimated Monthly Margin of the Aggregate Water Use Below the General Standard

| WU_NAME | FACILITY | WUSD_ID | DA on DR (SQ MILE) | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
|-----------------------------|-----------------------------|-----------------|--------------------|------|------|-------|-------|-------|-------|--------|-------|------|-------|-------|-------|
| Start of designated reach | | | 3172.75 | 68.5 | 71.7 | 166.5 | 544.4 | 144.6 | 126.1 | 3.3 | 123.1 | 56.4 | 130.5 | 129.0 | 350.3 |
| LONDONDERRY COUNTRY CLUB | | 20240 20240-S01 | 3178.20 | 68.6 | 71.8 | 166.7 | 545.2 | 144.8 | 126.3 | 3.2 | 123.2 | 56.5 | 130.7 | 129.3 | 351.2 |
| DERRY WWTF | WASTE WATER TREAT PLANT | 20101 20101-D01 | 3178.36 | 71.2 | 74.2 | 170.1 | 549.1 | 147.6 | 129.0 | 5.2 | 125.4 | 58.5 | 132.8 | 131.7 | 354.0 |
| MERRIMACK VILLAGE DIST | WATER WORKS | 20504 20504-S05 | 3184.60 | 70.7 | 73.7 | 169.8 | 549.5 | 147.2 | 128.3 | 4.2 | 124.9 | 57.9 | 132.5 | 131.3 | 354.4 |
| MERRIMACK VILLAGE DIST | WATER WORKS | 20504 20504-S04 | 3184.60 | 70.5 | 73.5 | 169.5 | 549.2 | 147.0 | 128.0 | 3.9 | 124.7 | 57.7 | 132.4 | 131.1 | 354.2 |
| Souhegan DR | Sum of Souhegan Water Use | | 3404.32 | 75.0 | 78.1 | 179.9 | 585.8 | 156.3 | 136.6 | 4.3 | 132.3 | 61.2 | 140.9 | 140.2 | 389.6 |
| PASSACONAWAY COUNTRY CLUB | GOLF COURSE | 20476 20476-S01 | 3404.38 | 75.0 | 78.1 | 179.9 | 585.8 | 156.3 | 136.6 | 4.3 | 132.3 | 61.2 | 140.9 | 140.2 | 389.7 |
| JONES CHEMICAL INC | MERRIMACK PLANT | 20156 20156-S01 | 3404.38 | 75.0 | 78.1 | 179.9 | 585.8 | 156.3 | 136.6 | 4.3 | 132.3 | 61.2 | 140.9 | 140.2 | 389.6 |
| JONES CHEMICAL INC | MERRIMACK PLANT | 20156 20156-D01 | 3404.38 | 75.0 | 78.1 | 179.9 | 585.8 | 156.3 | 136.6 | 4.3 | 132.3 | 61.2 | 141.0 | 140.2 | 389.7 |
| Naticook Brook | Naticook Brook | | 3410.66 | 74.1 | 77.2 | 179.3 | 585.2 | 154.2 | 134.3 | 1.5 | 130.4 | 59.4 | 139.7 | 139.7 | 389.9 |
| TOWN OF LONDONDERRY | CONTINENTAL PARK | 20756 20756-S01 | 3420.85 | 74.3 | 77.4 | 179.7 | 586.8 | 154.6 | 134.7 | 1.6 | 130.8 | 59.6 | 140.1 | 140.1 | 391.6 |
| WILSON FARM OF NH | WILSON FARM | 20307 20307-S01 | 3420.85 | 74.3 | 77.4 | 179.7 | 586.8 | 154.6 | 134.7 | 1.6 | 130.8 | 59.6 | 140.1 | 140.1 | 391.6 |
| WILSON FARM OF NH | WILSON FARM | 20307 20307-S04 | 3421.90 | 74.3 | 77.4 | 179.7 | 587.0 | 154.6 | 134.7 | 1.6 | 130.8 | 59.6 | 140.1 | 140.1 | 391.7 |
| WILSON FARM OF NH | WILSON FARM | 20307 20307-S02 | 3421.90 | 74.3 | 77.4 | 179.7 | 587.0 | 154.6 | 134.7 | 1.5 | 130.8 | 59.6 | 140.1 | 140.1 | 391.7 |
| ANHEUSER-BUSCH INC | MERRIMACK BREWERY | 20308 20308-S01 | 3422.21 | 71.3 | 74.6 | 177.0 | 583.9 | 151.0 | 131.1 | (1.9) | 127.2 | 56.4 | 137.0 | 137.1 | 389.0 |
| ANHEUSER-BUSCH INC | MERRIMACK BREWERY | 20308 20308-D03 | 3422.21 | 71.3 | 74.6 | 177.0 | 583.9 | 151.1 | 131.2 | (1.6) | 127.3 | 56.5 | 137.0 | 137.1 | 389.0 |
| ANHEUSER-BUSCH INC | MERRIMACK BREWERY | 20308 20308-D01 | 3422.21 | 71.3 | 74.6 | 177.0 | 583.9 | 151.1 | 131.2 | (1.6) | 127.3 | 56.5 | 137.0 | 137.1 | 389.0 |
| PENNICHUCK WATER WORKS | WATER WORKS | 20030 20030-S02 | 3422.50 | 71.3 | 74.6 | 177.0 | 584.0 | 151.1 | 131.2 | (14.3) | 127.3 | 54.0 | 137.0 | 137.1 | 389.1 |
| DUCHARME SAND & GRAVEL | | 20675 20675-S01 | 3431.78 | 71.5 | 74.7 | 177.4 | 585.5 | 151.4 | 131.5 | (14.2) | 127.7 | 54.2 | 137.4 | 137.4 | 390.6 |
| WILSON FARM OF NH | WILSON FARM | 20307 20307-S03 | 3431.78 | 71.5 | 74.7 | 177.4 | 585.5 | 151.4 | 131.5 | (14.4) | 127.7 | 54.2 | 137.4 | 137.4 | 390.6 |
| RODONIS FARM ENTERPRISES | RODONIS FARM | 20680 20680-S01 | 3432.70 | 71.5 | 74.8 | 177.4 | 585.6 | 151.5 | 131.6 | (14.4) | 127.7 | 54.2 | 137.4 | 137.5 | 390.7 |
| NASHUA CORPORATION | NASHUA SPECIALITY DIVISION | 20276 20276-D02 | 3432.70 | 71.6 | 74.8 | 177.4 | 585.6 | 151.5 | 131.6 | (14.4) | 127.7 | 54.2 | 137.4 | 137.5 | 390.7 |
| MERRIMACK WWTF | WASTE WATER TREAT PLANT | 20091 20091-D01 | 3432.70 | 76.1 | 78.8 | 182.0 | 590.4 | 156.2 | 136.3 | (9.9) | 132.5 | 58.7 | 141.8 | 141.7 | 395.0 |
| Pennichuck Brook | Pennichuck Brook | | 3458.54 | 58.1 | 62.0 | 165.2 | 576.6 | 136.6 | 112.8 | (43.7) | 105.9 | 33.4 | 120.1 | 124.3 | 380.5 |
| RODONIS FARM ENTERPRISES | RODONIS FARM | 20680 20680-S02 | 3459.05 | 58.1 | 62.1 | 165.2 | 576.7 | 136.7 | 112.8 | (43.7) | 105.9 | 33.4 | 120.1 | 124.3 | 380.6 |
| Nashua River | Nashua River | | 3998.72 | 68.8 | 72.8 | 186.7 | 662.9 | 158.1 | 134.2 | (38.5) | 127.2 | 44.0 | 141.6 | 145.9 | 466.9 |
| Glover Brook to First Brook | Glover Brook to First Brook | | 4003.96 | 68.9 | 72.9 | 186.9 | 663.5 | 158.1 | 134.2 | (38.7) | 127.1 | 43.8 | 141.5 | 145.8 | 467.7 |
| Salmon Brook | Salmon Brook | | 4040.52 | 69.7 | 73.6 | 188.4 | 669.4 | 159.4 | 135.5 | (38.6) | 128.3 | 44.5 | 143.0 | 147.3 | 473.6 |
| NASHUA WWTF | NASHUA POTW | 20077 20077-D01 | 4040.57 | 89.7 | 92.5 | 211.7 | 696.5 | 182.7 | 157.9 | (21.0) | 146.8 | 61.7 | 160.5 | 128.6 | 453.0 |
| NASHUA COUNTRY CLUB | NASHUA COUNTRY CLUB | 20684 20684-S01 | 4041.77 | 89.7 | 92.5 | 211.7 | 696.7 | 182.7 | 157.9 | (21.4) | 146.7 | 61.5 | 160.6 | 128.7 | 453.2 |
| GREEN MEADOW GOLF CLUB IN | GREEN MEADOW GOLF CLUB IN | 20227 20227-S01 | 4045.47 | 89.8 | 92.6 | 211.9 | 697.3 | 182.9 | 157.7 | (22.3) | 146.4 | 61.4 | 160.6 | 128.8 | 453.8 |
| HAMPSHIRE CHEMICAL CORP | HAMPSHIRE CHEMICAL | 20125 20125-D01 | 4045.47 | 90.0 | 92.8 | 212.1 | 697.6 | 183.1 | 157.8 | (22.1) | 146.6 | 61.7 | 160.9 | 129.1 | 454.1 |
| end of DR | NH/ Mass Border | | 4046.27 | 90.0 | 92.8 | 212.1 | 697.7 | 183.1 | 157.9 | (22.1) | 146.6 | 61.7 | 161.0 | 129.1 | 454.2 |

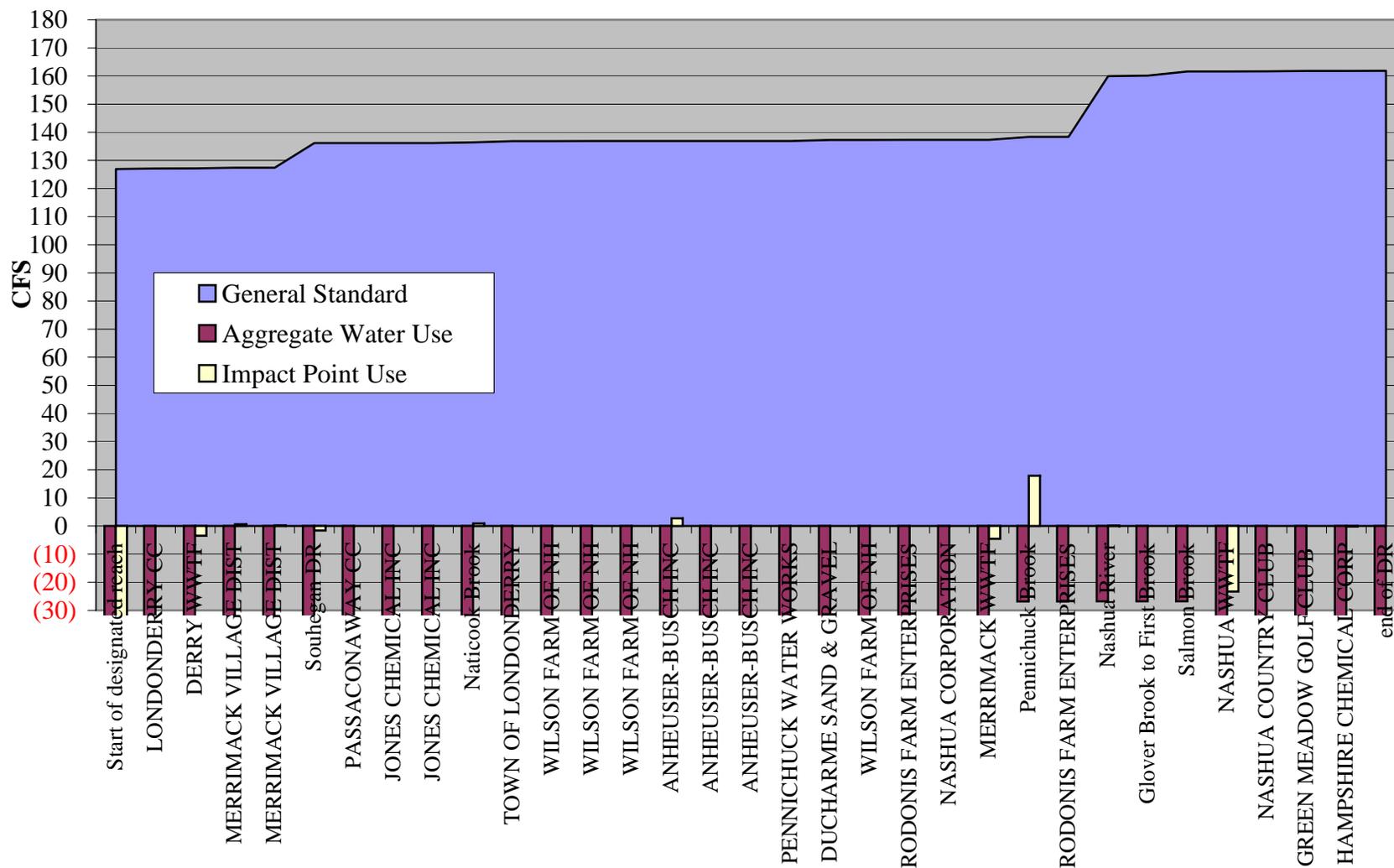
January 2003 Lower Merrimack



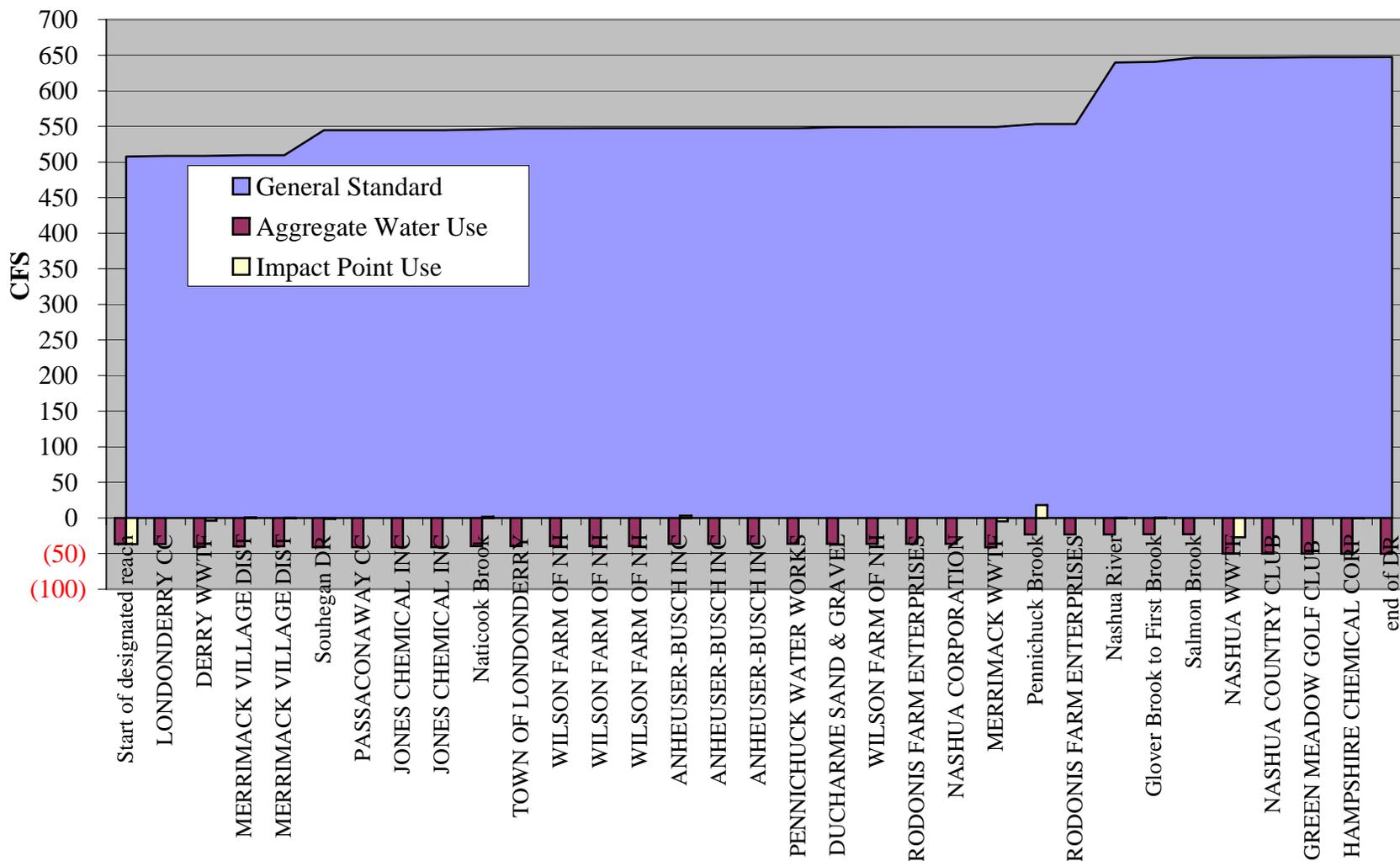
February 2003 Lower Merrimack



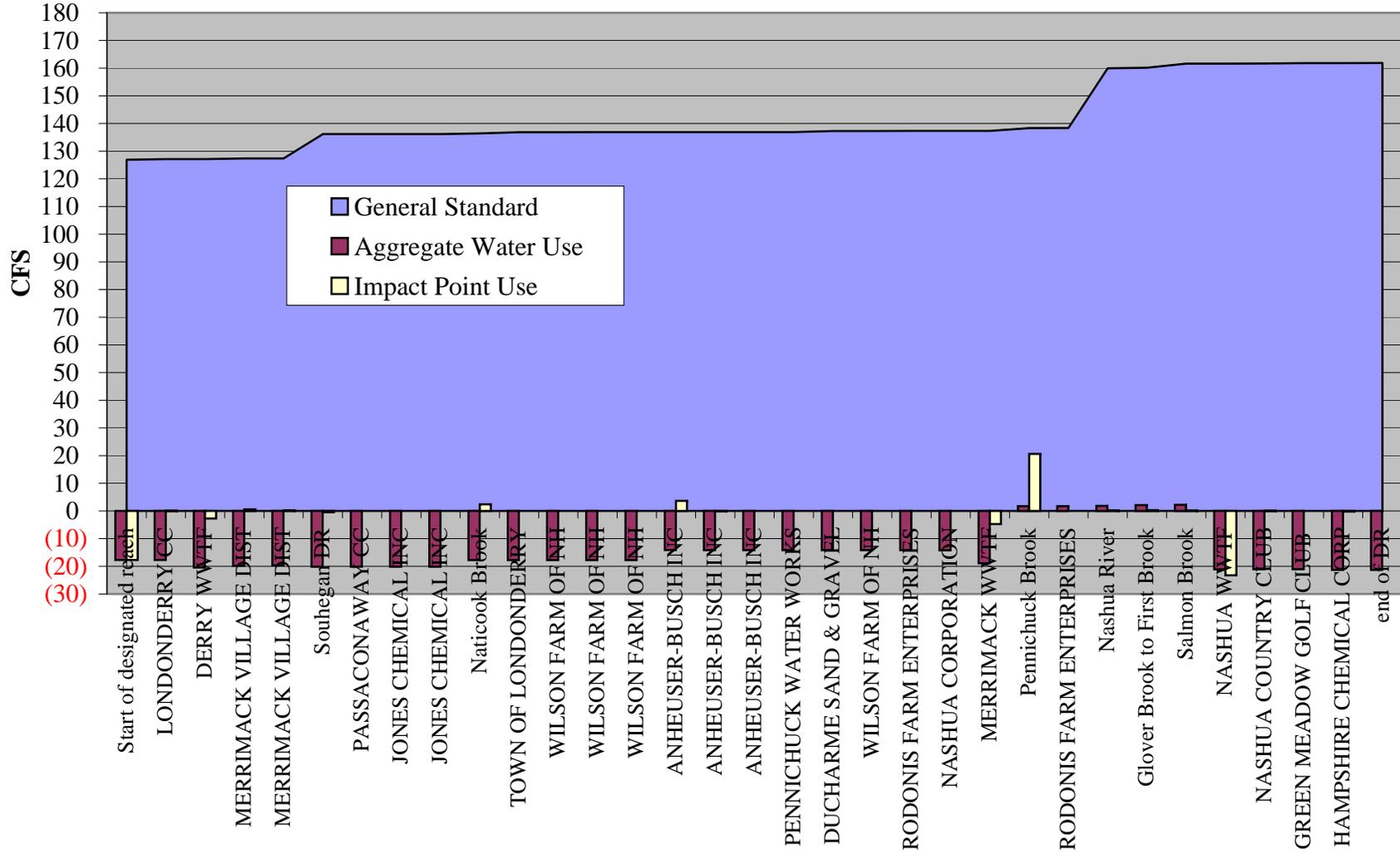
March 2003 Lower Merrimack



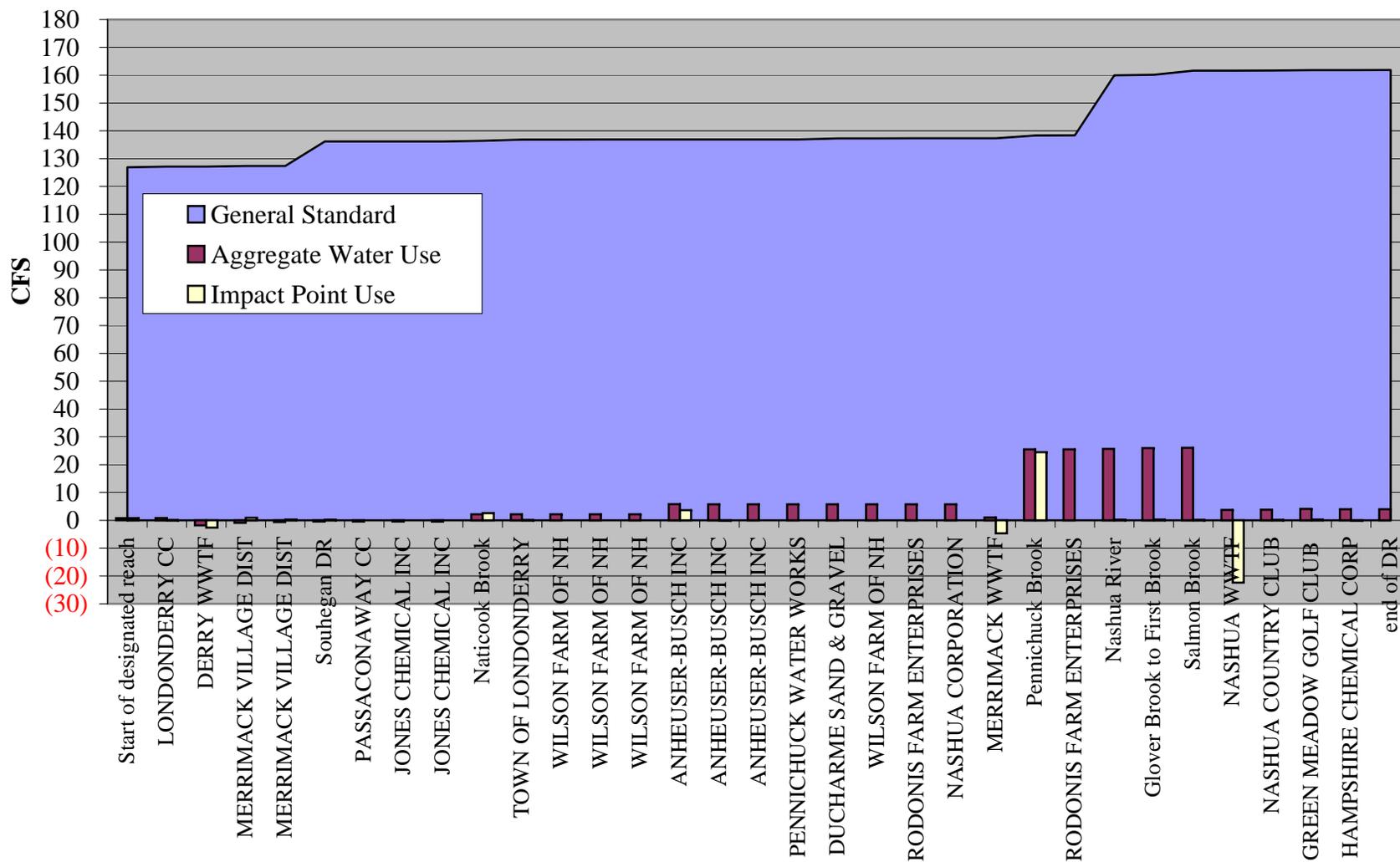
April 2003 Lower Merrimack



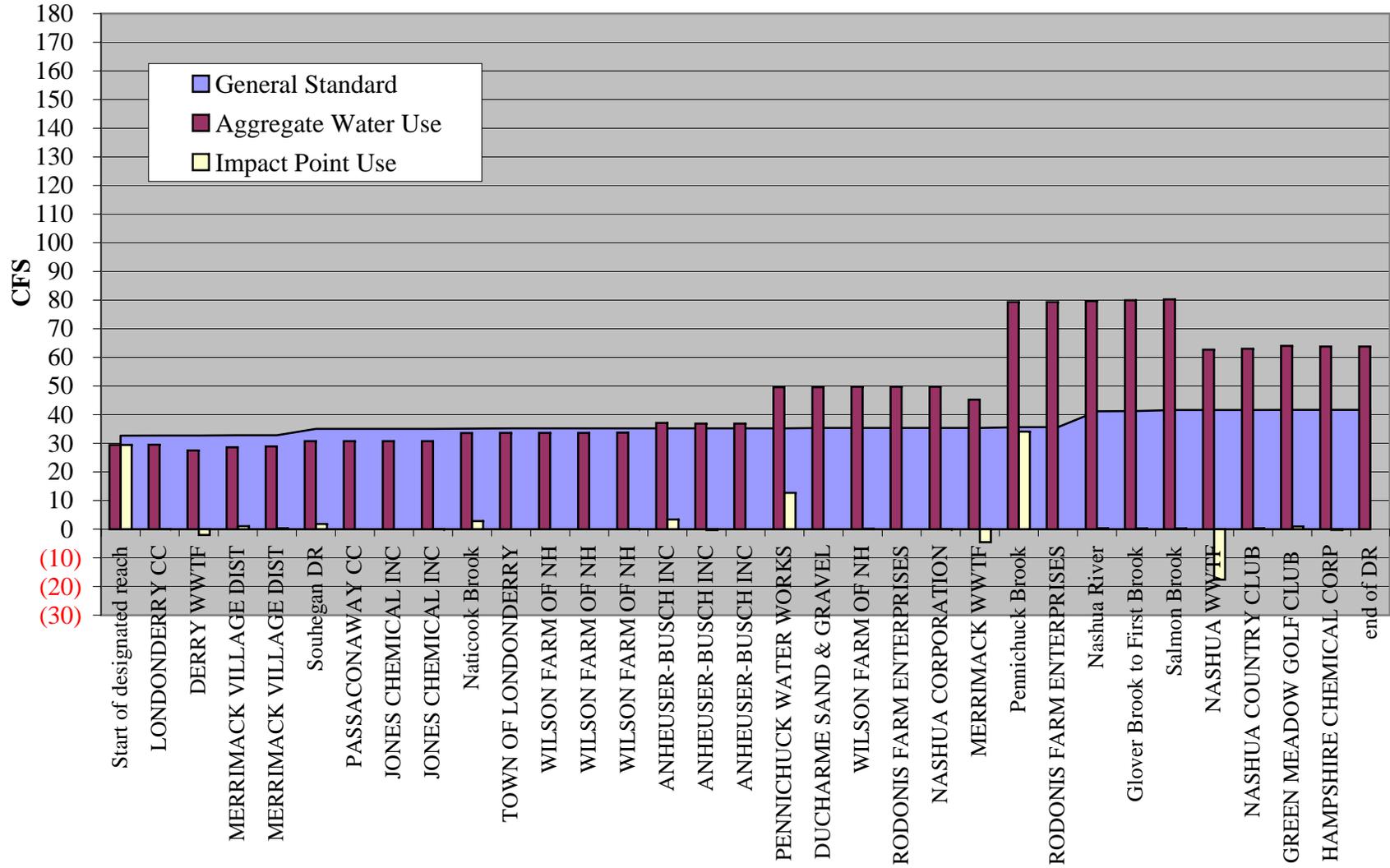
May 2003 Lower Merrimack



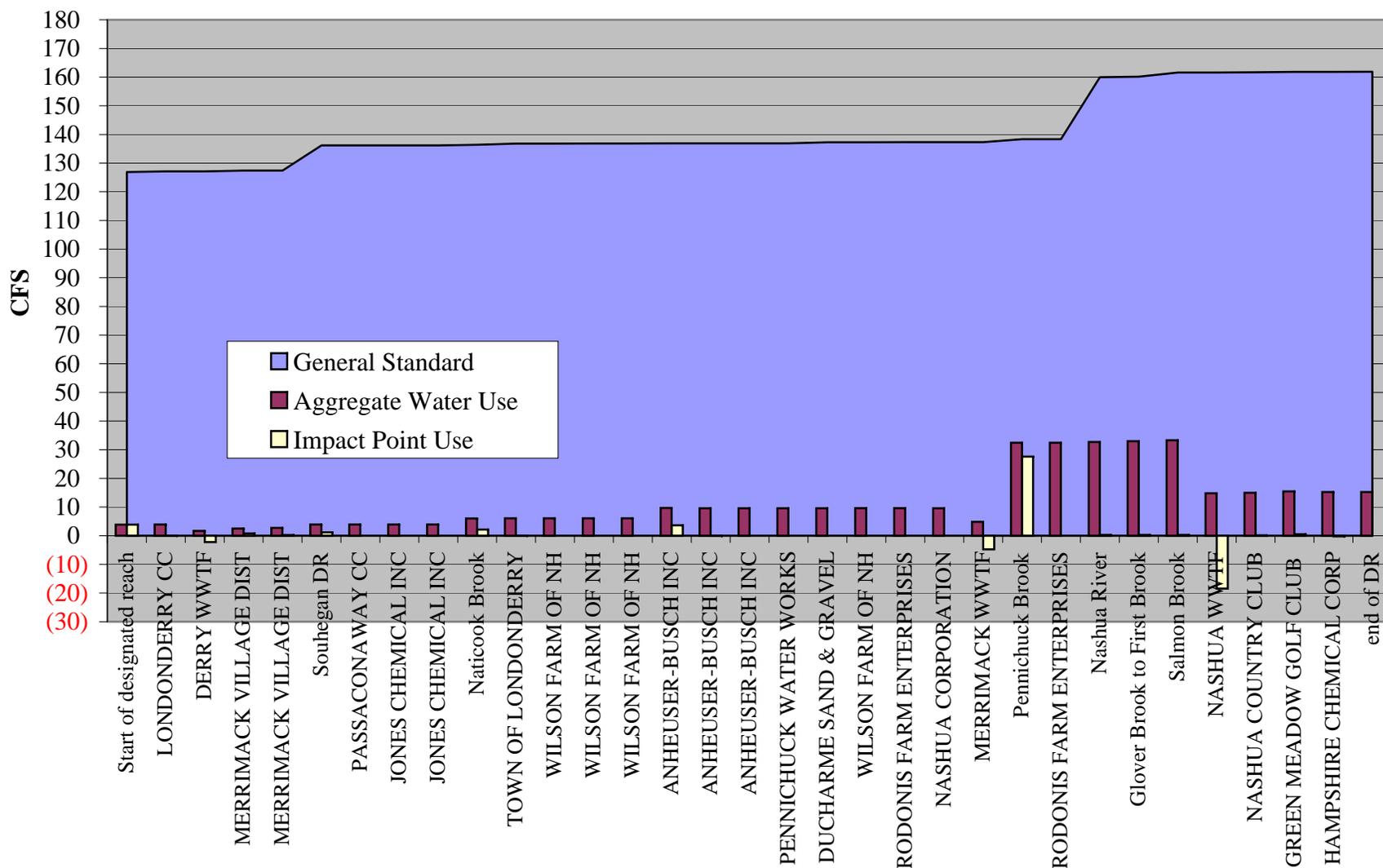
June 2003 Lower Merrimack



July 2003 Lower Merrimack

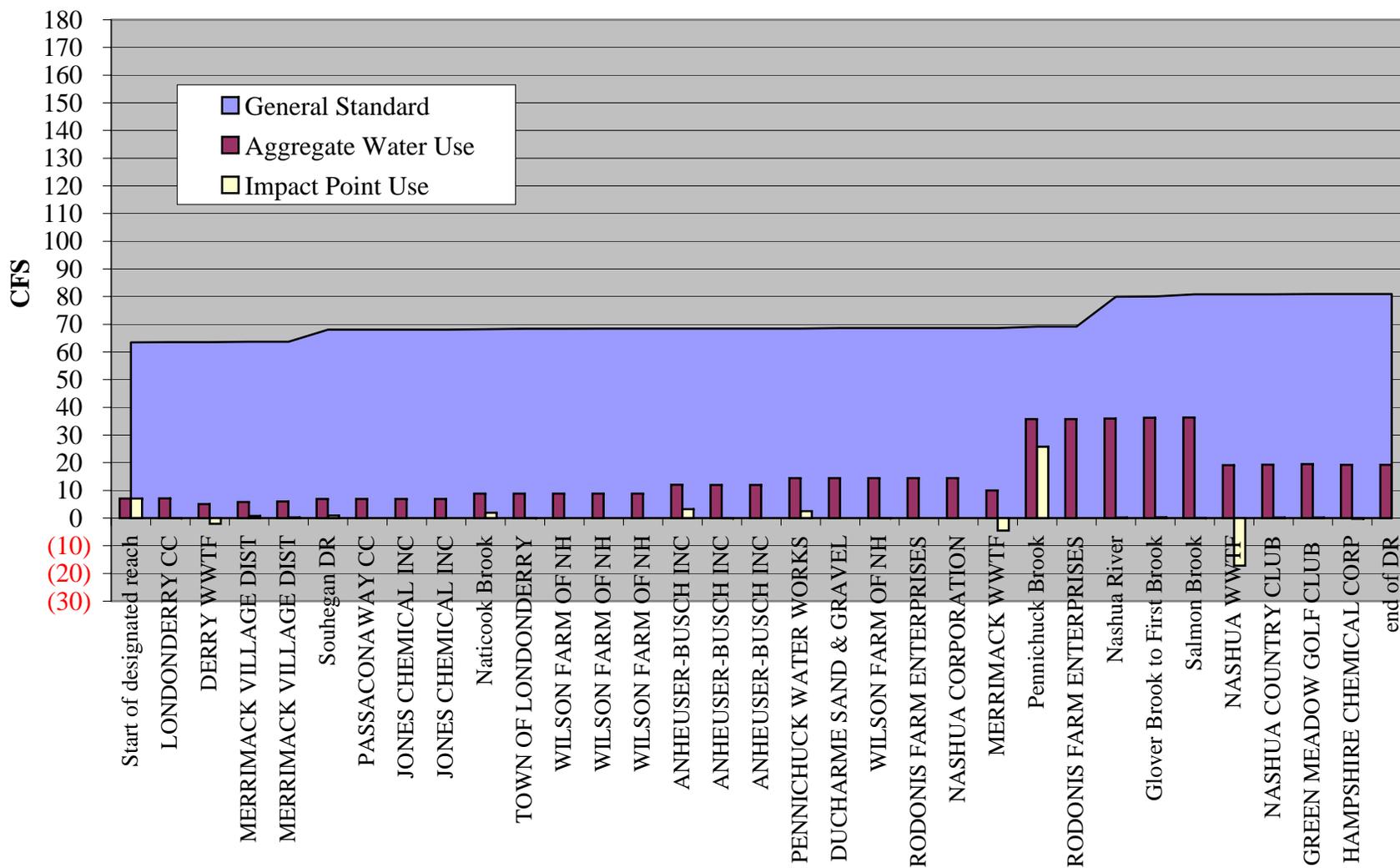


August 2003 Lower Merrimack



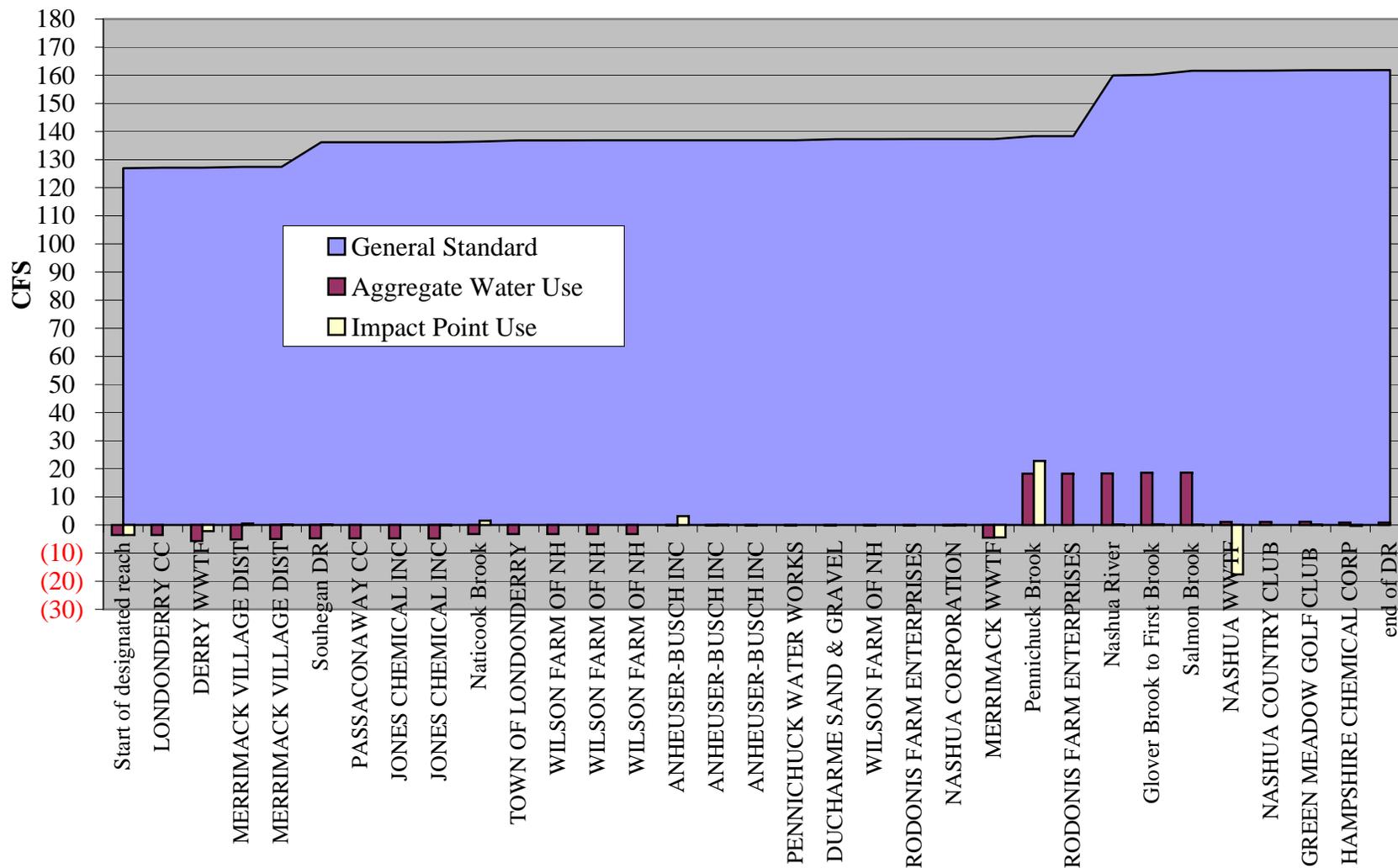
(10)
(20)
(30)

September 2003 Lower Merrimack



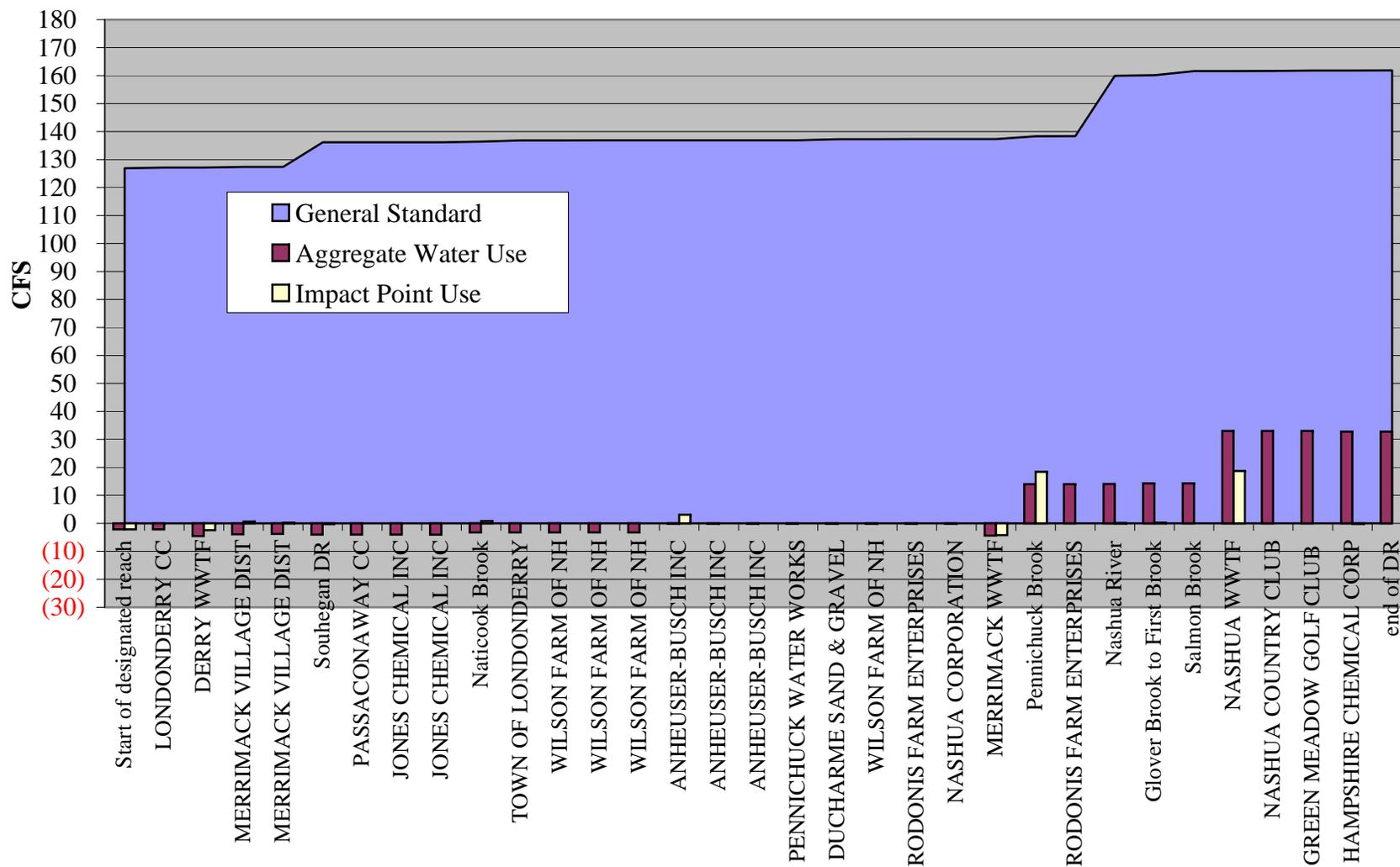
(10)
(20)
(30)

October 2003 Lower Merrimack

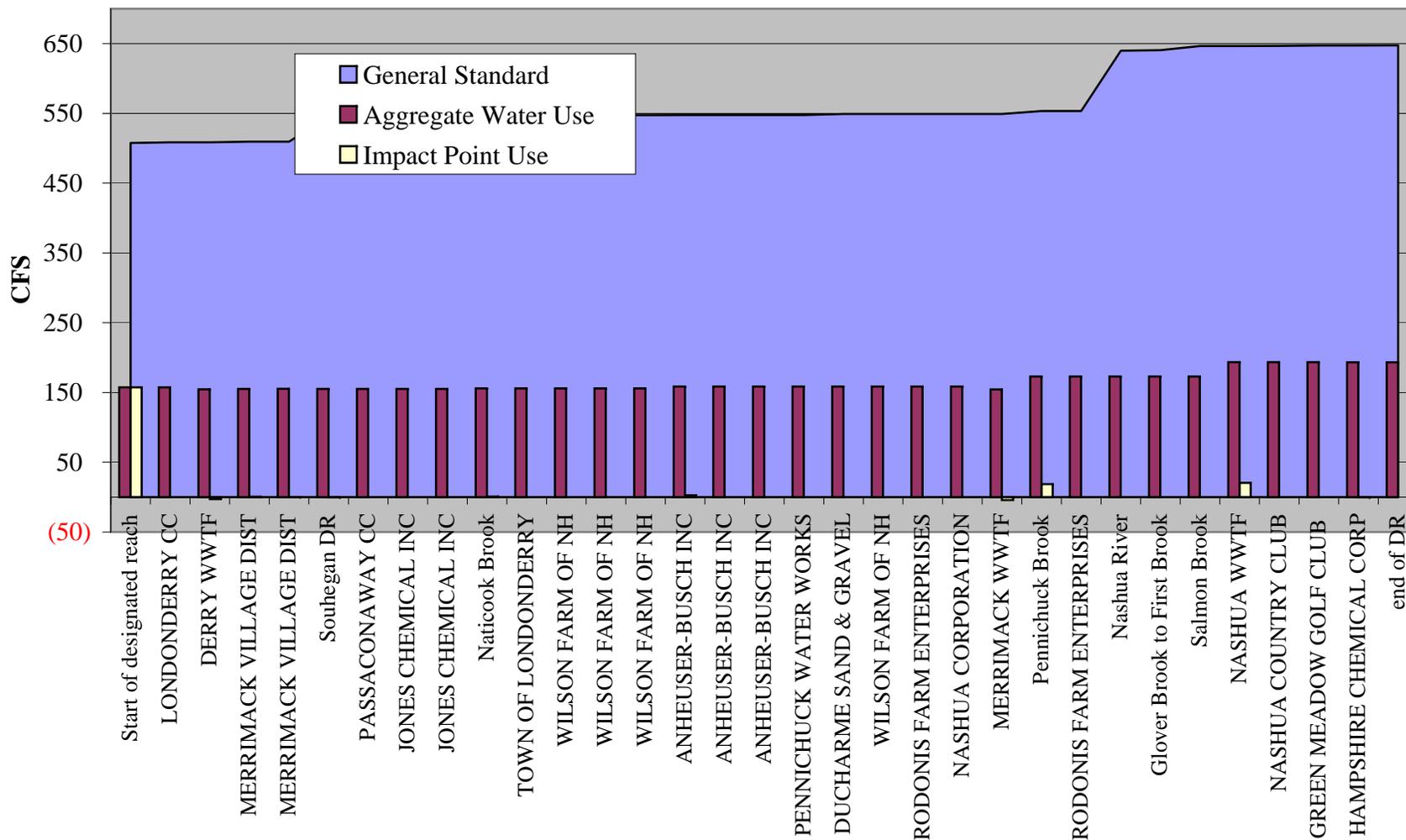


(10)
(20)
(30)

November 2003 Lower Merrimack



December 2003 Lower Merrimack



(50)